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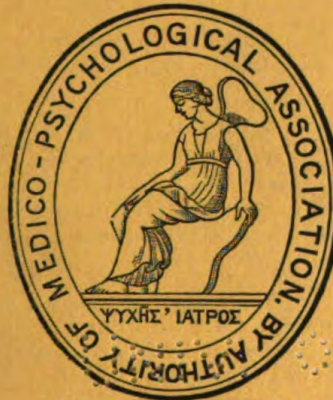
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OF
MENTAL SCIENCE.

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Exchange Journals.

British.

Asylum News; Brain; British Medical Journal; Bristol Medico-Chirurgical Journal; Dublin Medical Journal; Edinburgh Medical Journal; Glasgow Medical Journal; Hospital; Lancet; Mind; Proceedings of the Society for Psychical Research; Scottish Medical and Surgical Journal; Review of Neurology and Psychiatry; British Journal of Psychology.

American.

Alienist and Neurologist; Journal of Insanity; Journal of Medical Sciences; Journal of Comparative Neurology; Journal of Mental and Nervous Diseases; Journal of Mental Pathology; Journal of Psychology; Medicine; Monthly Cyclopædia of Practical Medicine; Psychological Review; Quarterly Journal of Inebriety; Reports of the Smithsonian Institute; Transactions of the American Medico-Psychological Association; Universal Medical Journal.

French.

Archives Anthropologie Criminelle; Annales Médico-Psychologiques; Annales des Sciences Psychiques; Archives de Neurologie; Gazette des Hôpitaux; Journal de Médecine de Bordeaux; Nouvelle Iconographie de la Salpêtrière; Polybiblion; Progrès Médicale; Revue Philosophique; Revue de Psychiatrie; Revue Scientifique; Revue de l'Hypnotisme; Bulletin de l'Institut Psychique.

Belgian.

Bulletin de la Société de Médecine Mentale de Belgique.

German.

Allgemeine Zeitschrift für Psychiatrie; Archiv für Psychiatrie und Nervenkrankheiten; Centralblatt für Anthropologie; Der Irrenfreund; Jahrbücher für Psychiatrie; Kraepelin's Psychologische Arbeiten; Monatsschrift für Psychiatrie und Neurologie; Neurologisches Centralblatt; Philosophische Studien; Psychiatrische Wochenschrift; Zeitschrift für Psychologie.

Italian.

Annali di Freniatria; Annali di Nevrologia; Archivio di Psichiatria; Il Manicomio Moderno; La Psichiatria; Rivista di Patologia nervosa e mentale; Rivista Sperimentale di Freniatria; Rivista Neuropatologia Psichiatria; Rivista di Psicologia.

Russian.

Archiv Psychiatrii, Nevrologuii, i Soudobnoi Psychopatologii; Obozrenie Psychiatrii, Nevrologuii, i Experimentalnoi Psychologii; Voprosi Nervno-psychitscheckoi Medizini; Voprosi filosofii i psychologii.

Books and Pamphlets Received.

Conduct and its Disorders Biologically Considered, *Mercier*; Body and Mind, *McDougall*; Scientific Mental Healing, *H. Addington Bruce*; Manual of Psychiatry, *Dr. Fursac*, translated and edited by *A. J. Rosanoff*; The Story of my Reincarnation, *Zivola*; Selbstbefreiung Aus Nervösen Leiden, *Wilhelm Bergmann*; Aliénistes et Philanthropes, *René Semelaigne*; Arbeiten aus dem Pathologischen Institut der Universität Helsingfors (Finland), *Prof. Dr. E. A. Hömén*; IV Internationaler Kongress zur Fürsorge für Geisteskranke, Berlin, October, 1910, Offizieller Bericht, *Prof. Dr. Boedeker* und *Dr. Falkenberg*.

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- 1841. Dr. Blake, Nottingham.
- 1842. Dr. de Vitré, Lancaster.
- 1843. Dr. Conolly, Hanwell.
- 1844. Dr. Thurnam, York Retreat.
- 1847. Dr. Wintle, Warneford House, Oxford.
- 1851. Dr. Conolly, Hanwell.
- 1852. Dr. Wintle, Warneford House.

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- 1854. A. J. Sutherland, M.D., St. Luke's Hospital, London.
- 1855. J. Thurnam, M.D., Wilts County Asylum.
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- 1866. W. A. F. Browne, M.D., Commissioner in Lunacy for Scotland.
- 1867. C. A. Lockhart Robertson, M.D., Haywards Heath Asylum.
- 1868. W. H. O. Sankey, M.D., Sandywell Park, Cheltenham.
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- 1879. J. A. Lush, M.D., Fisherton House, Salisbury.
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- 1881. D. Hack Tuke, M.D., London.
- 1882. Sir W. T. Gairdner, M.D., Glasgow.
- 1883. W. Orange, M.D., State Criminal Lunatic Asylum, Broadmoor.
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- 1886. Sir Geo. H. Savage, M.D., Bethlem Royal Hospital.
- 1887. Fred. Needham, M.D., Barnwood House, Gloucester.
- 1888. Sir T. S. Clouston, M.D., Royal Edinburgh Asylum.
- 1889. H. Hayes Newington, M.R.C.P., Ticehurst, Sussex.
- 1890. David Yellowlees, M.D., Gartnavel Asylum, Glasgow.
- 1891. E. B. Whitcombe, M.R.C.S., City Asylum, Birmingham.
- 1892. Robert Baker, M.D., The Retreat, York.
- 1893. J. Murray Lindsay, M.D., County Asylum, Derby.
- 1894. Conolly Norman, F.R.C.P.I., Richmond Asylum, Dublin.
- 1895. David Nicolson, C.B., M.D., State Criminal Lunatic Asylum, Broadmoor.
- 1896. William Julius Mickle, M.D., Grove Hall Asylum, Bow.
- 1897. Thomas W. McDowall, M.D., Morpeth, Northumberland.
- 1898. A. R. Urquhart, M.D., James Murray's Royal Asylum, Perth.
- 1899. J. B. Spence, M.D., Burntwood Asylum, nr. Lichfield, Staffordshire.
- 1900. Fletcher Beach, M.B., 79, Wimpole Street, W.
- 1901. Oscar T. Woods, M.D., District Asylum, Cork, Ireland.
- 1902. J. Wilesworth, M.D., F.R.C.P., Rainhill Asylum, near Liverpool.

1903. Ernest W. White, M.B., M.R.C.P., City of London Asylum, Dartford, Kent.
 1904. R. Percy Smith, M.D., F.R.C.P., 36, Queen Anne Street, Cavendish Square, London, W.
 1905. T. Outterson Wood, M.D., F.R.C.P., 40, Margaret Street, Cavendish Square, London, W.
 1906. Robert Jones, M.D., F.R.C.P., F.R.C.S., Claybury Asylum, Woodford Bridge, Essex.
 1907. P. W. MacDonald, M.D., County Asylum, Dorchester.
 1908. Chas. A. Mercier, M.D., F.R.C.P., F.R.C.S., 34, Wimpole Street, London, W.
 1909. W. Bevan-Lewis, M.Sc., L.R.C.P., Medical Director, West Riding Asylum, Wakefield.
 1910. John Macpherson, M.D., F.R.C.P. Edin., Commissioner in Lunacy, 8, Darnaway Street, Edinburgh.
 1911. Wm. R. Dawson, B.A., M.D., F.R.C.P.I., D.P.H., Inspector of Lunatic Asylums, Dublin Castle, Dublin.

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1896. Allbutt, Sir T. Clifford, K.C.B., M.D., D.Sc., LL.D., F.R.S., F.R.C.P. Regius Professor of Physic, Univ. Camb., St. Radegund's, Cambridge.
 1881. Benedikt, Prof. M., Franciskaner Platz 5, Vienna.
 1907. Bianchi, Prof. Leonardo, Manicomio Provinciale di Napoli. (*Corr. Mem.*, 1896.)
 1900. Blumer, G. Alder, M.D., L.R.C.P. Edin., Butler Hospital, Providence, U.S.A. (*Ord. Mem.*, 1890.)
 1900. Bresler, Johannes, M.D., Oberarzt, Lublinitz, Silesia. (*Corr. Mem.*, 1896.)
 1881. Brosius, Dr.,
 1876. Browne, Sir J. Crichton-, M.D. Edin., LL.D., D.Sc., F.R.S., Lord Chancellor's Visitor, Royal Courts of Justice, Strand, W.C. (*PRESIDENT*, 1878.)
 1902. Brush, Edward N., M.D., Sheppard and Enoch Pratt Hospital, Towson, Maryland, U.S.A.
 1887. Chapin, John B., M.D., Pennsylvania Hospital for the Insane, Philadelphia, U.S.A.
 1909. Collins, Sir William J., D.L., M.D., M.S., B.Sc. Lond., F.R.C.S. Eng., 1, Albert Terrace, Regent's Park, N.W.
 1902. Coupland, Sidney, M.D., F.R.C.P. Lond., Commissioner in Lunacy, 16, Queen Anne Street, Cavendish Square, London, W.
 1872. { Courtenay, E. Maziere, B.A., M.B., M.Ch. Univ. Dubl., Formerly Inspector
 1891. { of Lunatics in Ireland, Lunacy Office, Dublin Castle. (*Secretary for Irish Division*, 1876-87.)
 1911. Donkin, Sir Horatio Bryan, M.A., M.D. Oxon., F.R.C.P. Lond. (Medical Adviser to Prison Commissioners and Director of Convict Prisons), 62, Portland Place, W.
 1879. Echeverria, M. G., M.D.
 1896. Ferrier, Sir David, M.A., M.D., LL.D., F.R.S., F.R.C.P., 34, Cavendish Square, London.
 1872. Fraser, John, M.B., C.M., F.R.C.P.E., Formerly Commissioner in Lunacy, 13, Heriot Row, Edinburgh.
 1898. Hine, George T., F.R.I.B.A., 35, Parliament Street, London, S.W.
 1881. Hughes, C. H., M.D., St. Louis, Missouri, United States.
 1909. Kraepelin, Dr. Emil, Professor of Psychiatry, The University, Munich.
 1887. Lentz, Dr., Asile d'Aliénés, Tournai, Belgique.
 1910. Macpherson, John, M.D., F.R.C.P. Edin., Commissioner in Lunacy, 8, Darnaway Street, Edinburgh. (*PRESIDENT*, 1910-11.) (*Ordinary Member from 1886.*)
 1898. Magnan, V., M.D., Asile de Ste. Anne, Paris.
 1911. Moeli, Prof. Dr. Karl, Director, Herzberge Asylum, Berlin.
 1897. Morel, M. Jules, M.D., 56, Boulevard Leopold, Ghent, Belgium.

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1889. Needham, Frederick, M.D.St. And., M.R.C.P.Edin., M.R.C.S.Eng.,
Commissioner in Lunacy, 19, Campden Hill Square, Kensington,
W. (PRESIDENT, 1887.)
1909. Obersteiner, Dr. Heinrich, Professor of Neurology, The University, Vienna
1881. Peeters, M., M.D., Gheel, Belgium.
1900. Ritti, Ant., 68, Boulevard Exelmans, Paris. (*Corr. Mem.*, 1890.)
1887. Schüle, Heinrich, M.D., Illenau, Baden, Germany.
1911. Semelaigne, René, M.D.Paris, Secrétaire des Séances de la Société
Medico-Psychologique de Paris, 16, Avenue de Madrid, Neuilly,
Seine, France. (*Corresponding Member from 1893.*)
1881. Tamburini, A., M.D., Reggio-Emilia, Italy.
1901. Toulouse, Dr. Edouard, Directeur du Laboratoire de Psychologie experi-
mental à l'Ecole des Hautes Etudes Paris et Médecin en chef de
l'Asile de Villejuif, Seine, France.
1910. Trevor, Arthur Hill, B.A.Oxon., of the Inner Temple, Barrister at Law,
Commissioner in Lunacy, 4, Albemarle Street, London, W.
1904. Tuke, Sir John Batty, M.D., D.Sc., LL.D., F.R.C.P., 20, Charlotte
Square, Edinburgh.

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1904. Bierão, Caetano, 48, Rua Formosa, Lisbonne, Portugal.
1911. Boedeker, Prof. Dr. Justus Karl Edmund, Privat Dozent and Director,
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1897. Buschan, Dr. G., Stettin, Germany.
1904. Caroleü, Wilfrid, Manicomia de Sta. Crur, St. Andreo de Palamar,
Barcelona, Spain.
1896. Cowan, F. M., M.D., 107, Perponcher Straat, The Hague, Holland.
1902. Estense, Benedetto Giovanni Selvatico, M.D., 116, Piazza Porta Pia, Rome.
1911. Falkenberg, Dr. Wilhelm, Oberarzt, Irrenanstalt, Herzberge, Berlin.
1907. Ferrari, Giulio Cesare, M.D., Director of the Manicomio Provinciale,
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1911. Friedlander, Prof. Dr. Adolf Albrecht, Director of the Hohe Mark Klinik,
nr. Frankfort.
1904. Koenig, William Julius, Deputy Superintendent, Dalldorf Asylum, Berlin.
1880. Kornfeld, Dr. Hermann, Fr. Schlesien, Han'ptpostluyerstr., Breslau.
1889. Kowalowsky, Professor Paul, Kharkoff, Russia.
1895. Lindell, Emil Wilhelm, M.D., Sweden.
1901. Manheimer-Gommès, Dr., 32, Rue de l'Arcade, Paris.
1909. Moreira, Dr. Julien, M.D.Bahia, Professor and Director of the National
Manicomium of Rio de Janeiro (*Editor of the Brazilian Archives of
Psychiatry, etc.*).
1897. Näcke, Dr. P., Hubertusberg Asylum, Leipzig.
1886. Parant, M. Victor, M.D., Toulouse.
1909. Pilcz, Dr. Alexander (Professor of Psychiatry in the University of
Vienna), Superintendent Landessanatorium fur Nerven und Geistes-
kranke Steinhof, Vienna.
1890. Régis, Dr. E., 54, Rue Huguerie, Bordeaux.

MEMBERS OF THE ASSOCIATION.

Alphabetical List of Members of the Association, with the year in which they joined. The Asterisk means Members who joined between 1841 and 1855.

- 1900. Abbott, Henry Kingsmill, B.A., M.D.Dublin, D.P.H.Ireland, Medical Superintendent, Hants County Asylum, Fareham.
- 1891. Adair, Thomas Stewart, M.D., Ch.M.Edin., Medical Superintendent, Storthe's Hall Asylum, Kirkburton, near Huddersfield. (*Hon. Sec. N. and M. Division since 1908.*)
- 1910. Adam, George Henry, M.R.C.S., L.R.C.P.Lond., Manager and Medical Superintendent, West Malling Place, Kent.
- 1868. Adams, Josiah O., M.D.Durh., F.R.C.S.Eng., J.P.,
- 1886. Agar, S. Hollingsworth, jun., B.A.Cantab., M.R.C.S.Eng., Hurst House, Henley-in-Arden.
- 1905. Alcock, Benjamin James, M.A., M.B., Ch.B.Aberd., James Murray's Royal Asylum, Perth.
- 1869. Aldridge, Chas., M.D.Aber., L.R.C.P.Lond., Bellevue House, Plympton, Devon.
- 1905. Alexander, Edward Henry, M.B., Ch.M.Edin., M.R.C.S., L.R.C.P.Lond., Physician Superintendent, Ashbourne Hall Asylum, Dunedin, New Zealand.
- 1839. Alexander, Hugh de Maine, M.D.Edin., Medical Superintendent, Aberdeen City District Asylum, Kingsseat, Newmachar, Aberdeen.
- 1890. Alexander, Robert Reid, M.D.Aber., 25, Lingfield Avenue, Kingston-on-Thames.
- 1899. Allmann, Dorah Elizabeth, M.B., B.Ch., B.A.O.(R.U.I.), Assistant Medical Officer, District Asylum, Armagh.
- 1885. Amsden, Geo., M.B., Ch.M.Edin., M.R.C.S., L.R.C.P.Lond., The Old Rectory, Noke, near Islip, Oxon.
- 1908. Auderson, James Richard Sumner, M.B., Ch.B.Glas., Senior Assistant Medical Officer, Cumberland and Westmorland Asylum, Garlands, Carlisle.
- 1898. Anderson, John Sewell, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Hull City Asylum, Willerby, near Hull.
- 1909. Anderson, John Theodore, L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Senior Assistant Medical Officer, Hospital for the Insane, Claremont Park, West Australia.
- 1904. Archdale, Mervyn Alex., M.B., B.S.Dur., Medical Superintendent, East Riding Asylum, Beverley, Yorks.
- 1905. Archdall, Mervyn Thomas, L.S.A.Lond., L.R.C.P.&S.Edin., Brynn-y-Neuadd Hall, Llanfairfechan, N. Wales.
- 1910. Auden, G. A., M.A., M.D., B.C., D.P.H.Cantab., M.R.C.P.Lond., F.S.A., Medical Superintendent, Educational Committee, Edmund Street, Birmingham.
- 1891. Aveline, Henry T. S., M.D.Durh., M.R.C.S., L.R.C.P., M.P.C., Medical Superintendent, County Asylum, Cotford, near Taunton, Somerset. (*Hon. Sec. for S.W. Division, 1905-11.*)
- 1911. Babington, Alice E. May, M.B., Ch.B.Edin., Greenport, Fahan, Co. Donegal.
- 1903. Bailey, William Henry, M.D.Lond., M.R.C.S.Eng., L.S.A., D.P.H., Featherstone Hall, Southall, Midd.
- 1894. Baily, Percy J., M.B.Edin., Medical Superintendent, London County Asylum, Hanwell, W.
- 1909. Bain, John, M.A., M.B., B.Ch.Glasg., Assistant Medical Officer, Northampton County Asylum, Berrywood.
- 1906. Baird, Harvey, M.D., Ch.B.Edin., Senior Assistant Medical Officer, City Mental Hospital, Whitechurch, Cardiff.
- 1878. Baker, H. Morton, M.B.Edin., Assistant Medical Officer, 35, Glenmore Road, Haverstock Hill, N.W.
- 1888. Baker, John, M.D.Aberd., Medical Superintendent, State Asylum, Broadmoor, Berks.
- 1909. Ballard, Ernest Fryer, M.B., B.S.Lond., Assistant Medical Officer, Somerset and Bath Asylum, Wells.
- 1904. Barham, Guy Foster, B.A., M.B., B.C.Cantab., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, London County Asylum, Long-Grove, Epsom.
- 1910. Bartlett, George Norton, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Assistant Medical Officer, London County Asylum, Horton, Epsom.
- 1904. Barton, Samuel J., M.D.Dubl., Physician to the Norfolk and Norwich Hospital, Surrey Street, Norwich.
- 1901. Baskin, J. Loughed, M.D.Bru., L.R.C.P.&S.Edin., L.R.F.P.S.Glas., Llangarvan, Salisbury.

1902. Baugh, Leonard D. H., M.B., Ch.B.Edin., Gartloch Asylum, Gartcosh, Glasgow, N.B.
1864. Bayley, Joseph, M.R.C.S.Eng., Medical Superintendent, St. Andrew's Hospital, Northampton.
1893. Bayley, Joseph Herbert, M.B., Ch.M.Edin., L.R.C.P.Lond., Assistant Medical Officer, St. Andrew's Hospital, Northampton.
1907. Bazalgette, Sidney, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Fishponds Asylum, Bristol.
1874. Beach, Fletcher, M.B., F.R.C.P.Lond., *formerly Medical Superintendent, Darent Asylum, Dartford*; Stressa, Fanfare Road, Coulsdon, Surrey. (*Secretary Parliamentary Committee, 1896-1906. General Secretary, 1889-1896. PRESIDENT, 1900.*)
1892. Beadles, Cecil F., M.R.C.S., L.R.C.P.Lond., The Clergy House, Indlefield Green, Surrey.
1902. Beale-Browne, Thomas Richard, M.R.C.S.Eng., L.R.C.P.Lond., Medical Staff, South Nigeria, West Africa.
1909. Beeley, Arthur, M.Sc.Leeds, M.B., B.S.Lond., D.P.H.Camb. (*Assistant Medical Officer, E. Sussex Educational Committee*), 14, Park Avenue, Keighly, Yorks.
1912. Benson, Henry Porter D'Arcy, M.D., Ch.M.Edin., M.R.C.P., F.R.C.S. Edin., Medical Superintendent, Farnham House, Finglas, Dublin.
1899. Beresford, Edwyn H., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Tooting Bee Asylum, Tooting, S.W.
1879. Bevan-Lewis, William, M.Sc.Leeds, M.R.C.S., L.R.C.P.Lond., Elsinore, Dyke Road Avenue, Brighton. (*PRESIDENT, 1909-10.*)
1894. Blachford, James Vincent, M.D., B.S.Durham, M.R.C.S., L.R.C.P.Lond., 87, Belvedere Road, Upper Norwood, S.E.
1908. Blackmore, Humphrey, P., M.D.St. And., M.R.C.S.Eng., L.S.A., Physician, Salisbury.
1898. Blair, David, M.A., M.D., C.M.Glasg., County Asylum, Lancaster.
1897. Blandford, Joseph John Guthrie, B.A., D.P.H.Camb., M.R.C.S.Eng., L.R.C.P.Lond., Senior Assistant Medical Officer, County Asylum, Whittingham, Preston, Lanes.
1908. Blandy, Gurth Swinnerton, M.B., Ch.B.Edin., Assistant Medical Officer, Middlesex County Asylum, Napsbury, Herts.
1904. Bodvel-Roberts, Hugh Frank, M.A.Cantab., M.R.C.S., L.R.C.P.Lond., Middlesex County Asylum, Napsbury, near St. Albans, Herts.
1900. Bolton, Joseph Shaw, M.D., B.S., B.Sc.Lond., F.R.C.P., Medical Superintendent, West Riding Asylum, Wakefield.
1892. Bond, Charles Hubert, D.Sc., M.D., Ch.M.Edin., M.R.C.P.Lond., Medical Superintendent, London County Asylum, Long-Grove, Epsom. (*Hon. General Secretary, 1906-12.*)
1877. Bower, David, M.D.Aber., Springfield House, Bedford. (*Chairman, Parliamentary Committee, 1907-1910.*)
1877. Bowes, John Ireland, M.R.C.S.Eng., L.S.A., Medical Superintendent, County Asylum, Devizes, Wilts.
1893. Bowes, William Henry, M.D., B.S.Lond., F.R.C.S.Eng., Medical Superintendent, Plymouth Borough Asylum, Ivybridge, Devon.
1900. Bowles, Alfred, M.R.C.S., L.R.C.P.Lond., 10, South Cliff, Eastbourne.
1896. Boycott, Arthur N., M.D.Lond., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Herts County Asylum, Hill End, St. Albans, Herts. (*Hon. Sec. for S.-E. Division, 1900-05.*)
1912. Boyd, William, M.D.Edin., Assistant Medical Officer, District Asylum, Inverness.
1898. Boyle, A. Helen A., M.D.Bruce, L.R.C.P.&S.Edin., 9, The Drove, Hove, Brighton.
1883. Boys, A. H., L.R.C.P.Edin., M.R.C.S.Eng., The Grange, St. Peter's Street, St. Albans.
1891. Braine-Hartnell, George, M. P., L.R.C.P.Lond., M.R.C.S.Eng., Medical Superintendent, County and City Asylum, Powick, Worcester.
1911. Brander, John, M.B., Ch.M.Edin., Assistant Medical Officer, London County Asylum, Bexley, S.E.
1881. Brayn, Sir R., L.R.C.P.Lond., Gledholt, Hereford Road, Southsea.
1895. Briscoe, John Frederick, M.R.C.S.Eng., Resident Medical Superintendent, Westbrooke House Asylum, Alton, Hants.

1905. Brown, Harry Egerton, M.D., Ch.B.Glasg., M.P.C., West Koffies Asylum, Pretoria, S. Africa.
1904. Brown, Josephine, M.B.Lond.,
1908. Brown, Robert Cunyngham, M.D.Durh., Deputy Medical Officer, H.M. Prison, Birmingham.
1908. Brown, R. Dods, M.D., M.R.C.P.Edin., D.P.H., Senior Assistant Physician, Royal Asylum, Morningside, Edinburgh.
1908. Brown, Ralph, M.R.C.S., L.R.C.P.Lond., Bethlehem Royal Hospital, S.E.
1893. Bruce, Lewis C., M.D., F.R.C.P.Edin., Medical Superintendent, District Asylum, Druid Park, Murthly, N.B. (*Co-Editor of Journal since 1911; Hon. Sec. for Scottish Division, 1901-1907.*) (*Editor.*)
1892. Bullen, Frederick St. John, M.R.C.S.Eng., 3, Richmond Park Road, Clifton, Bristol.
1908. Bullmore, Charles Cecil, J.P., L.R.C.P.&S.Edin., L.F.P.S.Glas., Medical Superintendent, Flower House, Catford.
1904. Burrell, Arthur Ambrose, B.A., M.B., B.Ch.Dubl., Carrick Manor, Monkstown, Co. Dublin.
1911. Buss, Howard Decimus, B.A., B.Sc.France, M.D.Bru., M.R.C.S., L.R.C.P., L.M.S.S.A.Lond., Assistant Medical Officer, Fort Beaufort Asylum, Cape Colony.
1910. Cahir, John P., M.B., B.Ch., B.A.O. (R.U.I.), Assistant Medical Officer, Borough Asylum, Humberstone, Leicester.
1891. Caldecott, Charles, M.B., B.S.Lond., M.R.C.S., Medical Superintendent, Earlswood Asylum, Redhill, Surrey.
1889. Calcott, James T., M.D., B.S.Durh., M.R.C.S.Eng., Medical Superintendent, Borough Asylum, Newcastle-on-Tyne.
1894. Campbell, Alfred Walter, M.D.Edin., Macquarie Chambers, 183, Macquarie Street, Sydney, New South Wales.
1909. Campbell, Donald Graham, M.B., Ch.M.Edin., "Auchmillam," 12, Reid-haven Street, Elgin.
1880. Campbell, Patrick E., M.B., Ch.M.Edin., Medical Superintendent, Metropolitan Asylum, Caterham.
1897. Campbell, Robert Brown, M.B., Ch.M., M.R.C.P.Edin., Medical Superintendent, Stirling District Asylum, Larbert. (*Secretary for Scottish Division from 1910.*)
1905. Carre, Henry, L.R.C.P.&S.Irel., L.M., Woodilee Asylum, Lenzie, Glasgow.
1891. Carswell, John, L.R.C.P.Edin., L.R.F.P.S.Glasg., Certifying Medical Officer, Barony Parish, 5, Royal Crescent, Glasgow.
1874. Cassidy, D. M., M.D., C.M.McGill Coll., Montreal, D.Sc. (Public Health) Edin., F.R.C.S.Edin., Medical Superintendent, County Asylum, Lancaster.
1888. Chambers, James, M.A., M.D., (R.U.I.), The Priory, Roehampton. (*Co-Editor of Journal since 1905, Assistant Editor 1900-05.*)
1911. Chambers, Walter Duncannon, M.A., M.B., Ch.B.Edin., Crichton Royal Institution, Dumfries, N.B.
1865. Chapman, Thomas Algernon, M.D.Glas., L.R.C.S.Edin., Betula, Reigate.
1907. Chislett, Charles G. A., M.B., Ch.B.Glasg., Assistant Medical Officer, Woodilee Asylum, Lenzie, Glasgow.
1880. Christie, J. W. Stirling, L.R.C.P.Edin., Medical Superintendent, County Asylum, Stafford.
1878. Clapham, Wm. Crochley S., M.D., F.R.C.P.Ed., The Five Gables, Mayfield, Sussex. (*Hon. Sec. N. and M. Division, 1897-1901.*)
1907. Clarke, Geoffrey, M.D.Lond., Senior Assistant Medical Officer, London County Asylum, Banstead, Sutton, Surrey.
1910. Clarke, James Kilian, M.B., B.Ch., B.A.O. (R.U.I.), County Asylum, Hill End, St. Alban's, Herts.
1907. Clarkson, Robert Durward, B.Sc., M.D., Ch.M.Edin., F.R.C.P.Edin. (Medical Officer, Scottish National Institute for the Education of Imbecile Children), Highfield, Cockburn Street, Falkirk.
1901. Cleland, William Lennox, M.B., B.Ch.Edin., Park Side, Adelaide, South Australia.
1862. Clouston, Sir Thomas S., M.D., LL.D.Edin., F.R.C.P., F.R.S.E., 26, Heriot Row, Edinburgh. (*Editor of Journal, 1873-1881.*) (*PRESIDENT, 1888.*)

1900. Coffey, Patrick, L.R.C.P.&S.I., District Asylum, Maryborough, Queen's Co., Ireland.
1892. Cole, Robert Henry, M.D.Lond., M.R.C.P.Lond., 25, Upper Berkeley Street, W.
1900. Cole, Sydney John, M.A., M.D., B.Ch.Oxon., Senior Assistant Medical Officer, Wilts County Asylum, Devizes.
1906. Collen, Edward Victor, M.D., B.Ch., B.A.O.Dubl., Killycomain House, Portadown, Ireland.
1906. Collier, Walter Edgar, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Kent County Asylum, Maidstone.
1903. Collins, Michael Abdy, M.D., B.S.Lond., M.R.C.S., L.R.C.P., Medical Superintendent, Ewell Colony, Epsom, Surrey.
1878. Cooke, Edward Marriott, M.D.Lond., M.R.C.S.Eng., Commissioner in Lunacy, 69, Onslow Square, S.W.
1909. Cooke, John Benson, L.R.C.S.&P.Edin. (*H.M. Prison Service*), Love Lane, Wakefield.
1910. Coombes, Percival Charles, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Surrey County Asylum, Brookwood, Woking.
1905. Cooper, K. D., L.R.C.P.&S.Edin., L.F.P.S.Glas., c/o Leopold & Co., Apollo, Bunder, Bombay.
1903. Cormac, Harry Dove, M.B., B.S.Madras, Parkside Asylum, Macclesfield.
1891. Corner, Harry, M.D.Lond., M.R.C.S., L.R.C.P., M.P.C., 37, Harley Street, W.
1905. Cotter, James, L.R.C.P.&S.E., L.R.F.P.S.Glas., Down District Asylum, Downpatrick.
1897. Cotton, William, M.A., M.D.Edin., D.P.H.Cantab., 231, Gloucester Road, Bishopston, Bristol.
1910. Coulon, Thomas Peter, L.R.C.P.&S.Irel., Resident Medical Superintendent, District Asylum, Monaghan.
1910. Coupland, William Henry, L.R.C.S.&P.Edin., Senior Assistant Medical Officer, Royal Albert Asylum, Lancaster.
1893. Cowen, Thomas Philip, M.D., B.S.Lond., Assistant Medical Officer County Asylum, Lancaster.
1911. Cox, Donald Maxwell, M.R.C.S., L.R.C.P.Lond., 2, Royal Park, Clifton, Bristol.
1884. Cox, L. F., M.R.C.S., Plas Caermeddyg, Llanbedr, R.S.O., Merioneth.
1893. Craig, Maurice, M.A., M.D., B.C.Cantab., F.R.C.P.Lond., 54, Welbeck Street, W. (*Hon. Secretary of Educational Committee, 1905-8.*)
1904. Crawford, William Thomson, M.B.Lond., M.R.C.S., L.R.C.P., 260, Woodborough Road, Nottingham.
1897. Cribb, Harry Gifford, M.R.C.S.Eng., L.R.C.P.Lond., Senior Assistant Medical Officer, London County Asylum, Cane Hill, Coulsdon, Surrey.
1904. Cross, Harold Robert, L.S.A., Storthes Hall Asylum, Kirkburton, near Huddersfield.
1909. Crowther, Sydney Nelson, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Netherne County Asylum, Surrey.
1894. Cullinan, Henry M., L.R.C.P.I., L.R.C.S.I., Resident Medical Superintendent, Portraue House, Donabate, Co. Dublin.
1907. Daniel, Alfred Wilson, B.A., M.D., B.C.Cantab., M.R.C.S., L.R.C.P.Lond. Senior Assistant Medical Officer, London County Asylum, Hanwell, W.
1896. Davidson, Andrew, M.D., Ch.M.Aber., Wyoming, Macquarie Street, Sydney, N.S.W.
1911. Davie, James, M.B., Ch.B.Edin. (House-surgeon, The Infirmary, Peterborough), 8, Braid Street, Edinburgh.
1891. Davis, Arthur N., L.R.C.P., L.R.C.S.Edin., Medical Superintendent, County Asylum, Exminster, Devon.
1894. Dawson, William R., B.A., M.D., B.Ch.Dubl., F.R.C.P.I., D.P.H., Inspector of Lunatics in Ireland, Lunacy Offices, Dublin Castle, Dublin. (*Hon. Sec. to Irish Division, 1902-11; PRESIDENT, 1911-12.*)
1883. De Lisle, Samuel Ernest, L.R.C.P., L.R.C.S.I., Freaghmore, Lower Bourne, Farnham, Surrey.

1901. De Steiger, Adèle, M.B.Lond., County Asylum, Brentwood, Essex.
1905. Devine, Henry, M.D., B.S., M.R.C.P.Lond., M.R.C.S., Senior Assistant Medical Officer, West Riding Asylum, Wakefield.
1904. Devon, James, L.R.C.P. & S.Edin., 6, Cathedral Square, Glasgow.
1903. Dickson, Thomas Graeme, L.R.C.P. & S.Edin., Medical Superintendent, Wye House, Buxton.
1911. Dickinson, William Gilbert, M.D.Durh., M.R.C.S., L.R.C.P.Lond., D.P.H.Lond., Wood Hill, Portishead, Somerset.
1909. Dillon, Kathleen, L.R.C.P.I., L.M., L.R.C.S.I., Assistant Medical Officer, District Asylum, Mullingar.
1905. Dixon, J. Francis, M.A., M.D., B.Ch.Dubl., Medical Superintendent, Borough Asylum, Leicester.
1879. Dodds, William J., M.D., D.Sc.Edin., Valkenburg, Mowbray, near Cape Town, South Africa.
1911. Donald, John Quin, L.R.C.P.&S.Edin., Medical Superintendent, Inversden Lodge Retreat, Dairsie, Cupar, N.B.
1908. Donald, Robert, M.B., Ch.B.Glas., Ashton, Plains, Airdrie, N.B.
1889. Donaldson, William Ireland, B.A., M.D., B.Ch.Univ. of Dubl., Medical Superintendent, County of London Manor Asylum, Epsom, Surrey.
1892. Donelan, John O'Connor, L.R.C.P.I., L.R.C.S.I., M.P.C., St. Dymphna's, North Circular Road, Dublin.
1899. Donelan, Thomas O'Connor, L.R.C.P. & L.R.C.S.I., Middlesex County Asylum, Napsbury, near St. Albans, Herts.
1902. Douglas, Archibald R., L.R.C.P.&S.Edin., L.R.F.P.S.Glas., Royal Albert Asylum, Lancaster.
1911. Douglas, Reginald Inglis, M.B., B.S.Durh., M.R.C.S., L.R.C.P., Assistant Medical Officer, St. Luke's Hospital, E.C.
1890. Douglas, William, M.D.Queen's Univ. Irel., M.R.C.S.Eng., Brandfold, Goudhurst.
1905. Dove, Augustus Charles, M.D., B.S.Durh., M.R.C.S.Eng., "Brightside," Crouch End Hill, N.
1897. Dove, Emily Louisa, M.B.Lond., 1, Vincent Square, Westminster, S.W.; University Club for Ladies, 4, George Street, Hanover Square, W.
1903. Dow, William Alex., M.D., B.S.Durh., M.R.C.S., L.R.C.P., D.P.H., H.M. Prison, Lewes.
1910. Downey, Michael Henry, M.B., Ch.B.Melb., L.R.C.P.&S.Edin., L.R.F.P.S. Glasg., Assistant Medical Officer, Parkside Asylum, Adelaide, South Australia.
1884. Drapes, Thomas, M.B.Dubl., L.R.C.S.I., Medical Superintendent, District Asylum, Enniscorthy, Ireland. (PRESIDENT-ELECT, 1910-11.)
1905. Drew, Capt. Charles Milligan, M.A., M.B., Ch.B.Glas., *R.A.M.C.*, c/o Messrs. Holt & Co., 3, Whitehall Place, S.W.
1907. Dryden, A. Mitchell, M.B., Ch.B.Edin., Woodilee Mental Hospital, Lenzie, N.B.
1902. Dudgeon, Herbert Wm., M.D.Durh., M.R.C.S.Eng., L.R.C.P.Lond., Medical Officer to the Egyptian Asylum, Abbassia, Cairo, Egypt.
1899. Dudley, Francis, L.R.C.P.&S.I., Senior Assistant Medical Officer, County Asylum, Bodmin, Cornwall.
1903. Dunston, John Thomas, M.D., B.S.Lond., Medical Superintendent, West Koppies, Pretoria.
1911. Dykes, Percy Armstrong, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Fulbourn Asylum, Cambridge.
1899. Eades, Albert I., L.R.C.P. & S.I., North Riding Asylum, Clifton, Yorks.
1903. Eady, George John, M.D.Brux., M.B.Lond., M.R.C.P.Edin., M.R.C.S. Eng., 6, Roland Houses, S. Kensington, S.W.
1874. Eager, Reginald, M.D.Lond., M.R.C.S.Eng., Northwoods, near Bristol.
1906. Eager, Richard, M.B., Ch.B.Aber., Assistant Medical Officer, Devon County Asylum, Exminster.

1873. Eager, Wilson, L.R.C.P.Lond., M.R.C.S.Eng., St. Aubyn's, Woodbridge, Suffolk.
1881. Earle, Leslie, M.D.Edin., 108, Gloucester Terrace, Hyde Park, W.
1891. Earls, James Henry, M.D., M.Ch. (R.U.I.), D.P.H., L.S.A., Claremont, Loughton, Essex.
1903. East, Guy Rowland, M.B., B.S.Durh., Northumberland County Asylum, Morpeth.
1907. East, Wm. Norwood, M.D., Lond., M.R.C.S., L.R.C.P., 2, North Road, Clapham Park, S.W.
1895. Easterbrook, Charles C., M.A., M.D., F.R.C.P.Ed., Physician Superintendent, Crichton Royal Institution, Dumfries.
1895. Edgerley, Samuel, M.A., M.D., Ch.M.Edin., Medical Superintendent, West Riding Asylum, Menston, nr. Leeds.
1897. Edwards, Francis Henry, M.D.Bru., M.R.C.P.Lond., Medical Superintendent, Camberwell House, S.E.
1901. Elgee, Samuel Charles, L.R.C.P., L.R.C.S.I., Senior Assistant Medical Officer, London County Asylum, Colney Hatch, N.
1889. Elkins, Frank Ashby, M.D.Edin., Medical Superintendent, Metropolitan Asylum, Leavesden, Herts.
1899. Ellerton, Henry B., M.R.C.S., L.R.C.P.Lond., Inspector of the Insane, Hospital for the Insane, Goodna, Brisbane, Queensland, Australia.
1912. Ellerton, John Frederick Heise, M.D.Bru., M.R.C.S.Eng., L.R.C.P. Edin., 8, Leam Terrace, Leamington Spa.
1873. Elliot, G. Stanley, M.R.C.P.Edin., F.R.C.S.Edin., 31, Belvedere Road, Upper Norwood, S.E.
1908. Ellis, Edward, M.D.Durh., L.R.C.S. & P.Edin., Craven House, Hopwood Lane, Halifax, Yorks.
1890. Ellis, William Gilmore, M.D.Bru., M.R.C.S.Eng., L.S.A., Straits Settlement, Singapore; temporarily to 11, Ruvigny Mansions, Putney.
1908. Ellison, Arthur, M.R.C.S., L.R.C.P., Deputy Medical Officer, H.M. Prison, Leeds, 120, Domestic Street, Holbeck, Leeds.
1899. Ellison, F. C., M.D., B.Ch., T.C.D., Assistant Medical Officer, District Asylum, Castlebar.
1911. Elmslie, G. Bell, M.B., Ch.B.Edin., Assistant Medical Officer, Stirling District Asylum, Tarbert.
1911. English, Ada, M.B., B.Ch. (R.U.I.), Assistant Medical Officer, District Asylum, Ballinasloe.
1901. Erskine, Wm. J. A., M.D., Ch.M.Edin., Senior Assistant Medical Officer, City Asylum, Nottingham.
1895. Eurich, Frederick Wilhelm, M.D., Ch.M.Edin., 4, Marlborough Road, Bradford.
1894. Eustace, Henry Marcus, M.D., B.Ch., B.A.Dubl., Assistant Physician, Hampstead and Highfield Private Asylum, Glasnevin, Dublin.
1909. Eustace, William Neilson, L.R.C.S. & P.Irel., L.M., Lisronagh, Glasnevin, co. Dublin.
1909. Evans, George, M.B.Lond., Assistant Medical Officer, London County Asylum, Bexley.
1891. Ewan, John Alfred, M.A.St. And., M.D.Edin., Greyness, Sleaford, Lincs.
1884. Ewart, C. T., M.D., Ch.M.Aberd., Senior Assistant Medical Officer, Claybury Asylum, Woodford Bridge, Essex.
1906. Ewens, George Francis William, Major I.M.S. Bengal, c/o Messrs. Grindlay & Co., 54, Parliament Street, S.W.
1907. Exley, John, L.R.C.P.I., L.M., M.R.C.S., Medical Officer, H.M. Prison; Grove House, New Wortley, Leeds.
1894. Farquharson, William F., M.D.Edin., Medical Superintendent, Counties Asylum, Garlands, Carlisle.
1907. Farries, John Stoddart, L.R.C.P., L.R.C.S.Edin., Medical Superintendent, Sandwell Hall, Handsworth, near Birmingham.
1908. Faulks, Edgar, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, London County Asylum, Bexley.

1903. Fennell, Charles Henry, M.A., M.D.Oxon, M.R.C.P.Lond., Senior Assistant Medical Officer, East Sussex Asylum, Hellingly, Sussex.
1908. Fenton, Henry Felix, M.B., Ch.B.Edin., Assistant Medical Officer, County and City Asylum, Powick, Worcester.
1907. Ferguson, J. J. Harrower, M.B., Ch.B.Edin., Senior Assistant Medical Officer, Fife and Kinross Asylum, Cupar, Fife.
1897. Fielding, James, M.D., Victoria Univ., Canada, M.R.C.S.Eng., L.R.C.P. Edin., 18, The Crescent, Norwich.
1906. Fielding, Saville James, M.B., B.S.Durh., Bethel Street, Norwich.
1873. Finch, John E. M., M.A., M.D.Cantab., M.R.C.S.Eng., Leicester.
1889. Finch, Richard T., B.A., M.B.Cantab., Medical Superintendent, Fisherton House, Salisbury.
1882. Finegan, A. D. O'Connell, L.R.C.P.I., Medical Superintendent, District Asylum, Mullingar, Ireland. (*Hon. Sec. for Irish Division, 1898-1902.*)
1889. Finlay, David, M.D.Glasg., Medical Superintendent, County Asylum, Bridgend, Glamorgan.
1906. Firth, Arthur Marcus, M.A., M.B., B.Ch.Edin., Wadsley Asylum, near Sheffield.
1903. Fitzgerald, Alexis, L.R.C.P. & S.I., L.M., District Asylum, Waterford.
1894. Fitzgerald, Charles E., M.D., M.Ch.Dubl., F.R.C.S.I., Surgeon-Oculist to the King in Ireland, 27, Upper Merrion Street, Dublin.
1888. Fitz-Gerald, Gerald C., M.D., B.C.Cantab., M.P.C., Medical Superintendent, Kent County Asylum, Chartham, nr. Canterbury.
1908. Fitzgerald, James Francis, L.R.C.P.&S.Irel., L.M., Assistant Medical Officer, District Asylum, Clonmel, Ireland.
1899. Fitzgerald, James J., M.D., B.Ch., B.A.O. (R.U.I.), Resident Medical Superintendent, Eglington House Asylum, Cork.
1904. Fleming, Wilfrid Louis Remi, M.R.C.S., L.R.C.P., Suffolk House, Pirbright, Surrey.
1894. Fleury, Eleonora Lilian, M.D., B.Ch. (R.U.I.), Assistant Medical Officer, Richmond Asylum, Dublin.
1908. Flynn, Thos. Aloysius, L.R.C.P.&S.I.,
1902. Forde, Michael J., M.D., M.Ch. (R.U.I.), Assistant Medical Officer, Portraue Asylum, Ireland.
1911. Forrester, Archibald Thomas William, M.D., B.S.Lond., M.R.C.S., L.R.C.P., Senior Assistant Medical Officer, Leicester and Rutland Counties Asylum, Narborough.
1902. Forster, Hermann Julius, L.R.C.P.I., L.S.A., Assistant Medical Officer, Brighton Borough Asylum, Hayward's Heath.
1906. Forster, R. A., M.B., Ch.B.Aber., The Asylum, Graham's Town, Cape Colony, S. Africa.
1906. Fortune, John, M.D., Ch.B.Edin., Senior Assistant Medical Officer, Ladywell Sanatorium, Salford.
1909. Foulerton, Alexander Grant Russell, F.R.C.S.Eng., L.R.C.P.Lond., D.P.H.Cantab. (*County Medical Officer of Health for E. Sussex*), Middlesex Hospital, W., Wealdside, Lewis.
1861. Fox, Charles H., M.D.St. And., M.R.C.S.Eng., 35, Heriot Row Edinburgh.
1881. Fraser, Donald, M.D., Ch.M.Glasg., F.R.F.P.S., 3, Orr Square, Paisley.
1901. French, Louis Alexander, M.R.C.S., L.R.C.P., H.M. Prison, Portland, Dorset.
1902. Fuller, Lawrence Otway, M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Three Counties' Asylum, Hitchin, Herts.
1906. Gane, Edward Palmer Steward, M.D.Dunelm, M.R.C.S.Eng., L.R.C.P. Lond., Borough Asylum, Ryehope, Sunderland.
1890. Gaudin, Francis Neel, M.R.C.S., L.S.A., M.P.C., Medical Superintendent, The Grove, St. Lawrence, Jersey.
1911. Gavin, Lawrence, M.B., Ch.B.Edin., L.R.C.P.&S.Edin., L.R.F.P.S. Glasg., Medical Superintendent, District Asylum, Mullingar.

1885. Gayton, Francis C., M.D.Aberd., M.R.C.S.Eng., Medical Superintendent, County Asylum, Netherne, Merstham, Surrey.
1908. Geale, William James, L.R.C.P.Edin., L.R.F.P.S.Glasg., Assistant Medical Officer, Scalebor Park, Burley-in-Wharfedale, Yorks.
1896. Geddes, John W., M.B., Ch.M.Edin., Medical Superintendent, County Borough Asylum, Berwick Lodge, Middlesbrough, Yorks.
1892. Gemmel, James Francis, M.B.Glasg., Medical Superintendent, County Asylum, Whittingham, Preston.
1904. Gibb, James Alex., M.B., Ch.B.Aberd., "Heanor," Derbyshire.
1910. Gibson, G. H. Rae, M.B., Ch.B.Edin., M.R.C.P.Edin., Assistant Physician, 2186, Seventh Avenue, W. Kitsieans, Vancouver.
1899. Gilfillan, Samuel James, M.A., M.B.Edin., Medical Superintendent, London County Asylum, Colney Hatch.
1910. Gilfillan, William, M.B., Ch.B.Glasg., St. Ann's Asylum, Port of Spain, Trinidad, B.W.I.
1889. Gill, Stanley, B.A.Dubl., M.D.Dubl., M.D.Durh., M.R.C.P.Lond., M.R.C.S.Eng., Shaftesbury House, Formby, Liverpool.
1904. Gillespie, Daniel, M.D. B.Ch. (R.U.I.), Wadsley Asylum, near Sheffield.
1897. Gilmour, John Rutherford, M.B., F.R.C.P.Edin., Medical Superintendent, West Riding Asylum, Scalebor Park, Burley-in-Wharfedale, Yorks.
1906. Gilmour, Richard Withers, M.B., B.S.Durh., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, St. Luke's Hospital, E.C.
1911. Gilmour, Walter, M.B., Ch.B.Glasg., The Laurels, Hamilton, N.B.
1878. Glendinning, James, M.D.Glasg., L.R.C.S.Edin., L.M., Medical Superintendent, Joint Counties Asylum, Abergavenny.
1909. Gloyne, Stephen Roodhouse, M.B., B.Ch.Leeds, D.P.H.Lond. (*Assistant Medical Officer, East Sussex Educational Committee*), 44, Estcourt Road, Wandsworth Common, S.W.
1898. Goldie-Scot, Thomas G., M.B., Ch.M.Edin., M.R.C.S., L.R.C.P., Pilmuir, Pencaitland, N.B.
1897. Good, Thomas Saxty, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, County Asylum, Littlemore, Oxford.
1889. Goodall, Edwin, M.D., B.S.Lond., F.R.C.P., Medical Superintendent, City Asylum, Cardiff.
1899. Gordon, James Leslie, M.B., Ch.B.Aberd., Tooting Bec Asylum, Tooting, London, S.W.
- * Gordon, William S., M.A., M.B., T.C.D., District Asylum, Mullingar.
1905. Gordon-Munn, John Gordon, M.D.Edin., F.R.S.E., Heigham Hall, Norwich.
1901. Gostwyck, C. H. G., M.B., Ch.B., M.R.C.P.Edin., Stirling District Asylum, Larbert.
1894. Graham, Samuel, L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Medical Superintendent, District Asylum, Antrim.
1887. Graham, William, M.D. (R.U.I.), L.R.C.S.Edin., Medical Superintendent, District Lunatic Asylum, Belfast.
1908. Graham, William S., M.B., B.Ch., B.A.O., R.U.I., Assistant Medical Officer, Somerset and Bath Asylum, near Taunton.
1910. Gray, Theodore Grant, M.B., Ch.B.Aberd., Mental Hospital, Porirua, Wellington, New Zealand.
1909. Greene, Thomas Adrian, L.R.C.S.Irel., L.M., R.C.P.Irel., Medical Superintendent, District Asylum, Carlow.
1886. Greenlees, T. Duncan, M.D.Edin., F.R.S.E., Fenstanton, Christ Church Road, Streatham Hill, S.W.
1904. Griffin, Ernest Harrison, B.A.Cantab., L.S.A.Lond., El Pèrù via San Fèlic, Venezuela.
1901. Grills, Galbraith Hamilton, M.D., B.Ch. (R.U.I.), Medical Superintendent, "Elmwood," Liverpool Road, Chester.
1900. Grove, Ernest George, M.R.C.S., L.R.C.P., Bootham Park, York.

1907. Grünbaum, Helen Gertrude, M.B., Ch.B.Birm., 38, Veld House, Leeds.
 1894. Gwynn, Charles Henry, M.D.Edin., co-Licentee, St. Mary's House, Whitchurch, Salop.
1905. Hallett, H. G., M.R.C.S., L.R.C.P.Lond., Darenth Asylum, Dartford, Kent.
 1894. Halstead, Harold Cecil, M.D.Durh., Medical Officer, Peckham House, Peckham.
 1903. Hanbury, Langton Fuller, M.R.C.S.Eng., L.R.C.P.Lond., West Ham Borough Asylum, Ilford, Essex.
 1901. Harding, William, M.D.Edin., M.R.C.P.Lond., Medical Superintendent, Northampton County Asylum, Berry Wood, Northampton.
 1899. Harmer, W. A., L.S.A., Resident Superintendent and Licentee, Redlands Private Asylum, Tonbridge, Kent.
 1904. Harper-Smith, George Hastie, B.A.Cantab., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Brighton County Borough Asylum, Haywards Heath.
 1898. Harris-Liston, L., M.D., M.R.C.S., L.R.C.P.Lond., L.S.A., Middleton Hall, Middleton St. George, Co. Durham.
 1905. Hart, Bernard, M.B.Lond., M.R.C.S.Eng., Long-Grove Asylum, Epsom, Surrey.
 1886. Harvey, Bagenal Crosbie, L.R.C.P.&S.Edin., L.A.H.Dubl., Resident Medical Superintendent, District Asylum, Clonmel.
 1892. Haslett, William John, M.R.C.S., L.R.C.P., Resident Medical Superintendent, Halliford House, Upper Halliford, Shepperton.
 1891. Havelock, John G., M.D., Ch.M.Edin., Physician Superintendent, Montrose Royal Asylum.
 1890. Hay, J. F. S., M.B., Ch.M.Aberd., Inspector-General of Asylums for New Zealand, Government Buildings, Wellington, New Zealand.
 1900. Haynes, Horace E., M.R.C.S., L.S.A., Littleton Hall, Brentwood.
 1895. Hearder, Frederic P., M.D., Ch.M.Edin., Medical Superintendent, Yorkshire Inebriate Reformatory, Cattal, Whixley, near York.
 1911. Heasman, Herbert Wilks, M.R.C.S., L.R.C.P.Lond., 40, Milford Road, Norbury, S.W.
 1911. Heffernan, Capt. P., *I.M.S.*, B.A., M.B., B.Ch. (R.U.I.), Locock's Gardens, Kilpauk, Madras.
 1905. Henderson, George, M.A., M.B.Edin., 619, Green Lanes, Harringay, N.
 1906. Herbert, Thomas, M.R.C.S.Eng., L.R.C.P.Lond., York City Asylum, Fulford, York.
 1877. Hetherington, Charles E., B.A., M.B., M.Ch.Dubl., Medical Superintendent, District Asylum, Londonderry, Ireland.
 1877. Hewson, R. W., L.R.C.P.&S.Edin., Medical Superintendent, Coton Hill, Stafford.
 1902. Higginson, John Wigmore, M.R.C.S., L.R.C.P.Lond., Resident Medical Officer, Hayes Park Asylum, Hayes Park, Middlesex.
 1882. Hill, H. Gardiner, M.R.C.S.Eng., L.S.A., Medical Superintendent, Middlesex County Asylum, Tooting.
 1907. Hine, T. Guy Macaulay, M.A., M.D., B.C.Cantab., 37, Hertford Street, Mayfair, W.
 1881. Hitchcock, Charles Knight, M.A., M.D.Cantab., Bootham Park, York.
 1909. Hodgson, Harold West, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Barnsley Hall Asylum, Bromsgrove, Worcestershire.
 1908. Hogg, Archibald, M.B., Ch.B.Glas., 47, Love Street, Paisley, N.B.
 1900. Holländer, Bernard, M.D.Freib., M.R.C.S., L.R.C.P.Lond., 57, Wimpole Street, W.
 1903. Hopkins, Charles Leighton, B.A., M.B., B.C.Cantab., York City Asylum, Fulford, York.
 1894. Hotchkiss, Robert D., M.A.Glasg., M.D., B.S.Durh., M.R.C.S., L.R.C.P.Lond., Renfrew Asylum, Dykebar, N.B.

1907. Howard, S. Carlisle, M.B., Ch.B.Aberd., Senior Assistant Medical Officer, County Asylum, Chester.
1912. Hughes Frank Percival, M.B., B.S.Lond., M.R.C.S., L.R.C.P., The Grove, Pinner, Middlesex.
1900. Hughes, Percy T., M.B., Ch.M.Edin., D.P.H.Lond., Medical Superintendent, Worcestershire County Asylum, Barnseley Hall, Bromsgrove.
1904. Hughes, William Stanley, M.R.C.S., L.R.C.P., Medical Superintendent, County Asylum, Denbigh.
1897. Hunter, David, M.A., M.B., B.C.Cantab., Medical Superintendent, West Ham Borough Asylum, Goodmayes, Ilford, Essex. (*Secretary for S.E. Division from 1910.*)
1909. Hunter, Douglas William, M.B., Ch.M.Glasg., Assistant Medical Officer, Royal Albert Asylum, Lancaster.
1904. Hunter, Percy Douglas, M.R.C.S., L.R.C.P.Lond., East Sussex County Asylum, Hellingly, Sussex.
1882. Hyslop, James, D.S.O., M.B., Ch.M.Edin., Natal Government Asylum, Pietermaritzburg.
1888. Hyslop, Theo. B., M.D., C.M.Edin., M.R.C.P.E., 5, Portland Place, London, W.
1908. Inglis, J. P. Park, M.B., Ch.B.Edin., Assistant Medical Officer, Metropolitan Asylum, Caterham, Surrey.
1906. Irwin, Peter Joseph, L.R.C.P.&S.I., L.M., Assistant Medical Officer, District Asylum, Limerick.
1911. Jackson, David James, B.A., M.B., B.Ch. (R.U.I.), Assistant Medical Officer, County Asylum, Chester.
1908. Jeffrey, Geo. Rutherford, M.B., Ch.B.Glas., Senior Assistant Physician, Crichton Royal Asylum, Dumfries.
1907. Jex-Blake, Bertha, M.B., Ch.B.Edin., Assistant Medical Officer, 13, Ennis-more Gardens, S.W.
1910. Johnson, Cecil, M.B., Ch.B.Vict., 6, Palewell Park, East Sheen, S.W.
1893. Johnston, Gerald Herbert, L.R.C.S. and L.R.C.P.Edin., Brooke House, Upper Clapton, N.
1905. Johnston, Thomas Leonard, L.R.C.P.&S.Edin., L.R.F.P.S.Glas., Brace-bridge Asylum, Lincoln.
1912. Johnstone, Emma May, L.R.C.P. & S.Edin., Holloway Sanatorium, Virginia Water, Surrey.
1878. Johnstone, J. Carlyle, M.D., C.M.Glasg., Medical Superintendent, Rox-burgh District Asylum, Melrose.
1903. Johnstone, Thomas, M.D.Edin., M.R.C.P.Lond.
1880. Jones, D. Johnston, M.D.Edin., South Haven, Beach Road, Weston-super-Mare.
1882. Jones, Robert, M.D.Lond., B.S., F.R.C.P., F.R.C.S., Medical Superinten-dent, London County Asylum, Claybury, Woodford, Essex. (*Gen. Secretary from 1897 to 1906.*) (*PRESIDENT 1906-7.*)
1898. Jones, W. Ernest, M.R.C.S.Eng., L.R.C.P.Lond., The Old Treasury Buildings, Spring Street, Melbourne.
1879. Kay, Walter S., M.D., Ch.M.Edin., M.R.C.S.Eng., 1, Rutland Park, Sheffield.
1886. Keay, John, M.D.Glasg., F.R.C.P.Edin., Medical Superintendent, Bangour Village, Uphall, Linlithgowshire.
1909. Keith, William Brooks, M.B., Ch.B.Aberd., Assistant Medical Officer, Kent County Asylum, Maidstone.
1909. Kellas, Arthur, M.B., Ch.B., D.P.H.Aberd., Senior Assistant Physician, Royal Asylum, Aberdeen.
1908. Kelly, Richard, M.B., B.Ch., B.A.C.Dub., Assistant Medical Officer, Storthes Hall Asylum, Kirkburton, near Huddersfield.
1898. Kemp, Norah, M.B., Ch.M.Glas., The Retreat, York.
1907. Keene, George Henry, M.D. (T.C.D.), 14, Palmerston Park, Rathmines, Dublin.
1911. Kennedy, Lt.-Col. Arthur (*R.A.M.C.*), L.R.C.P.&S.Irel., Royal Victoria Hospital, Netley.

1899. Kennedy, Hugh T. J., L.R.C.P.&S.I., L.M., Assistant Medical Officer, District Asylum, Enniscorthy, Wexford.
1910. Kerr, G. Lawson, M.B., Ch.B.Glasg., 19, Queen Square, Regent's Park, Glasgow.
1897. Kerr, Hugh, M.A., M.D.Glasg., Medical Superintendent, Bucks County Asylum, Stone, Aylesbury, Bucks.
1902. Kerr, Neil Thomson, M.B., Ch.M.Ed., Medical Superintendent, Lanark District Asylum, Hartwood, Shotts, N.B.
1893. Kershaw, Herbert Warren, M.R.C.S.Eng., L.R.C.P.Lond., Dinadale Park, near Darlington.
1897. Kidd, Harold Andrew, M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, West Sussex Asylum, Chichester.
1903. King, Frank Raymond, B.A.Cantab., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Northumberland House, Finsbury Park, N.
1897. Kingdon, Wilfred, M.B., B.S.Durh., 160, Goldhawk Road, W.
1905. Kingsbury, William Neave, M.R.C.S., L.R.C.P.Lond., 15, Blackheath Rise, Lewisham, S.E.
1902. King-Turner, A. C., M.B., Ch.M.Edin., The Retreat, Fairford, Gloucestershire.
1899. Kirwan, James St. L., B.A., M.B., B.Ch., B.A.O. (R.U.I.), Medical Superintendent, District Asylum, Ballinasloe, Ireland.
1908. Kirwan, Richard, R., M.B., B.Ch., B.A.O. (R.U.I.), West Riding Asylum, Menston, near Leeds.
1903. Kough, Edward Fitzadam, M.B., B.Ch.Dubl., Senior Assistant Medical Officer, County Asylum, Gloucester.
1898. Labey, Julius, M.R.C.S., L.R.C.P.Lond., L.S.A., Medical Superintendent, Public Asylum, Jersey.
1902. Langdon-Down, Percival L., M.A., M.B., B.C.Cantab., Dixland, Hampton Wick, Middlesex.
1896. Langdon-Down, Reginald L., M.A., M.B., B.C.Cantab., M.R.C.P.Lond., Normansfield, Hampton Wick.
1909. Laurie, James, M.B., Ch.M.Glasg. (*Medical Officer, Smithston Asylum*), Red House, Ardgowan Street, Greenock.
1902. Laval, Evariste, M.B., Ch.M.Edin., Princess Christian's Colony for Feeble-minded, Hildenborough, Kent.
1898. Lavers, Norman, M.D.Bruce., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Bailbrook House, Bath.
1899. Law, Charles D., L.R.C.P.&S.Edin., L.R.F.P.S., 117, Wilderspool Road, Warrington.
1892. Lawless, George Robert, F.R.C.S.I., Medical Superintendent, District Asylum, Armagh.
1870. Lawrence, Alexander, M.A., M.D.Aberd., 26, Hough Green, Chester.
1883. Layton, Henry A., M.R.C.S.Eng., L.R.C.P.Edin., Cornwall County Asylum, Bodmin.
1909. Leech, John Frederick Wolseley, M.D.Dubl., Enniscorthy, Co. Wexford.
1899. Leeper, Richard R., F.R.C.S.I., Medical Superintendent, St. Patrick's Hospital, Dublin. (*Hon. Sec. to the Irish Division from 1911.*)
1905. Le Fanu, Hugh, M.B., Ch.M.Aber., Salaga, Northern Territorial Force, Gold Coast Colony, West Africa.
1883. Legge, Richard J., M.D., Medical Superintendent, County Asylum, Mickleover, Derby.
1906. Leggett, William, B.A., M.B., B.Ch.Dubl., Assistant Medical Officer, Royal Asylum, Sunnyside, Montrose.
1894. Lentaigne, Sir John, B.A., F.R.C.S.I., Medical Visitor of Lunatics to the Court of Chancery, 42, Merrion Square, Dublin.
1863. Ley, H. Rooke, M.R.C.S.Eng., Beaulieu, Westhy Road, Boscombe, Hants.
1908. Littlejohn, Edward Salteine, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, London County Asylum, Hanwell, W.

1903. Logan, Thomas Stratford, L.R.C.P.&S.Edin., L.F.P.S.Glas., D.P.H., County of London Epileptic Colony, Ewell, Surrey.
1906. Long, Sydney Herbert, M.D.Cantab., Physician to Norfolk and Norwich Hospital, 37, St. Giles Street, Norwich.
1899. Longworth, Stephen G., L.R.C.P. L.R.C.S.I., County Asylum, Melton, Suffolk.
1898. Lord, John R., M.B., Ch.M.Edin., Medical Superintendent, London County Asylum, Horton, Epsom. (*Co-Editor of Journal since 1911; Assistant Editor of Journal, 1900-11.*)
1906. Lowry, James Arthur, M.D., B.Ch., B.A.O. (R.U.I.), Medical Superintendent, Surrey County Asylum, Brookwood.
1904. Lyall, C. H. Gibson, L.R.C.P.&S.Edin., Leicester Borough Asylum, Leicester.
1906. Lyell, John Hepburn, M.D., Ch.M.Glasg., Assistant Medical Officer to H.M. Prison, the Royal Infirmary, and Parish Council, Perth, 15, Marshall Place, Perth.
1872. Lyle, Thomas, M.D.Glasg., 34, Jesmond Road, Newcastle-on-Tyne.
1906. Macarthur, John, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Colney Hatch Asylum, London, N.
1899. Macartney, William H. C., L.R.C.P.&S.I., Riverhead House, Sevenoaks.
1911. Macaskill, Donald Cameron, M.B., Ch.B.Edin., Assistant Medical Officer, Stirling District Asylum, Larbert, N.B.
1880. MacBryan, Henry C., L.R.C.P. & S. Edin., Kingsdown House, Box, Wilts.
1911. McCalman, Hugh, M.B., Ch.B.Edin., Assistant Medical Officer, County Asylum, Lancaster.
1912. MacCarthy, Hilgrove Leslie, M.A., M.D.Dubl., D.P.H.Oxon., 27, Harcourt Street, Dublin.
1902. M'Carthy, Owen F., L.R.C.P.&S.I., District Lunatic Asylum, Cork, Ireland.
1900. McClintock, John, L.R.C.P. & L.R.C.S.Edin., Resident Medical Superintendent, Grove House, Church Stretton, Salop.
1900. McConaghey, John C., M.D., Ch.B.Edin., Medical Superintendent, Parkside Asylum, Macclesfield, Cheshire.
1901. MacDonald, James H., M.B., Ch.B.Glasg., Govan District Asylum, Hawkhead, Paisley, N.B.
1884. MacDonald, P. W., M.D., Ch.M.Aberd., Medical Superintendent, Dorset County Asylum, Herrison, Dorchester. (*First Hon. Sec. S.W. Division 1894 to 1905.*) (*PRESIDENT, 1907-8.*)
1911. MacDonald, Ronald, M.B., Ch.B.Edin., Assistant Medical Officer, London County Asylum, Bexley, Kent.
1905. MacDonald, William Fraser, M.B., Ch.B.Edin., Olive Lodge, Polworth Terrace, Edinburgh.
1905. McDougall, Alan, M.D.Vict., M.R.C.S., L.R.C.P.Lond., Medical Director, The David Lewis Colony, Sandle Bridge, near Alderley Edge, Cheshire.
1911. McDougall, William, M.A., M.B., B.C.Cantab., M.Sc.Vict. (*Wilde Reader in Psychology, Univ. Oxf.*), Foxcombe Hill, Oxford.
1906. McDowall, Colin Francis Frederick, M.D., B.S.Durh., Senior Assistant Medical Officer, County Asylum, Cheddleton, Staffs.
1870. McDowall, Thomas W., M.D.Edin., L.R.C.S., Medical Superintendent, Northumberland County Asylum, Morpeth. (*PRESIDENT, 1897-8.*)
1893. Macevoy, Henry John, M.D., B.Sc.Lond., M.P.C., 19, Mowbray Road, Brondesbury, London, N.W.
1895. Macfarlane, Neil M., M.D.Aber., Medical Superintendent, Government Hospital, Thotse Heights, Leribe, Basutoland, South Africa.
1883. Macfarlane, W. H., M.B. and Ch.B.Univ. of Melbourne, Medical Superintendent, Hospital for the Insane, New Norfolk, Tasmania.
1902. McGregor, John, M.B., Ch.B.Edin., Assistant Medical Officer, County Asylum, Bridgend, Glam.
1906. MacIlraith, Alex. Robert MacIntyre, L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Holly House, Rawtenstall, Lancs.
1905. MacIlraith, William MacLaren, L.R.C.P. & S.Edin., L.R.F.P.S.Glasg., L.D.S., Holly House, Rawtenstall, Lancs.

1899. McKelvey, Alexander Niel, L.&M.P.C.P.&S.I., Costley House, Epsom, Auckland, New Zealand.
1910. McKenzie, Ivy, M.B., Ch.B.Glasg., Director, Western Asylums Research Institute, Glasgow, 10, Claythorn Road, Glasgow.
1911. Mackenzie, John Cosserat, M.B., Ch.B.Edin., Assistant Medical Officer, County Asylum, Hereford.
1891. Mackenzie, Henry J., M.B., C.M.Edin., M.P.C., Assistant Medical Officer, The Retreat, York.
1911. MacKenzie, Marion Ellen, M.B., Ch.B.Edin. (*Medical Examiner for the Board of Education*), 7, The Valley, Scarborough.
1903. Mackenzie, Theodore Charles, M.B., Ch.B.Edin., District Asylum, Inverness.
1908. MacKenzie, William Tuach, M.D., Medical Superintendent, Royal and District Asylums, Dundee.
1899. MacKeown, William John, A.B., M.B., B.Ch. (R.U.I.), Assistant Medical Officer, County Asylum, Fareham, Hants.
1910. McKillop, Alexander Cameron, M.B., Ch.B.Edin., Senior Physician, Mental Hospital, Porirua, Wellington, New Zealand.
1909. MacLachlan, John Thomson, M.D.Glasg. (*Assistant Physician, Glasgow Royal Infirmary*), 310, Renfrew Street, Glasgow.
1904. Macnamara, Eric Danvers, M.A., M.B., 54, Welbeck Street, W.
1898. Macnaughton, George W. F., M.D., F.R.C.S.Edin., M.R.C.P.Lond., 33, Lower Belgrave Street, Eaton Square, London, S.W.
1910. MacPhail, Hector Duncan, M.A., M.B., Ch.B.Edin., Assistant Medical Officer, City Asylum, Gosforth, Newcastle-on-Tyne.
1882. Macphail, S. Rutherford, M.D.Edin., Derby Borough Asylum, Rowditch, Derby.
1896. Macpherson, Charles, M.D.Glas., Deputy Commissioner in Lunacy, 15, Rutland Square, Edinburgh.
1901. McRae, G. Douglas, M.D.Edin., F.R.C.P., Medical Superintendent, District Asylum, Ayr, N.B.
1902. Macrae, Kenneth Duncan Cameron, M.B., Ch.B.Edin., Bangour Village, Dochmont, Linlithgowshire.
1908. McWalter, William H., M.B., Ch.M.Glas., Medical Officer, H.M. Convict Prison, Peterhead.
1894. McWilliam, Alexander, M.A., M.B., C.M.Aber., Waterval, Odiham, Winchester, Hants.
1908. Mapother, Edward, M.D., B.S.Lond., F.R.C.S.Eng., Assistant Medical Officer, London County Asylum, Long-Grove, Epsom.
1903. Marnan, John, B.A., M.B., B.Ch.Dubl., Senior Assistant Medical Officer, Second County Asylum, Gloucester.
1896. Marr, Hamilton C., M.D.Glasg., F.R.F.P.S., Commissioner in Lunacy, 46, Murrayfield Avenue, Edinburgh. (*Hon. Sec. Scottish Division, 1907-1910.*)
1905. Marshall, Robert Macnab, M.D., Ch.B.Glasg., Gartnavel Royal Asylum, Glasgow.
1908. Martin, Henry Cooke, M.B., Ch.B.Edin., Assistant Medical Officer, Newport Borough Asylum, Caerleon.
1896. Martin, James Charles, L.R.C.S.I., L.M., L.R.C.P., Assistant Medical Officer, District Asylum, Letterkenny, Donegal.
1908. Martin, James Ernest, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Assistant Medical Officer, London County Asylum, Long-Grove, Epsom.
1907. Martin, Mary Edith, L.R.C.P.&S.Edin., L.R.F.G.S.Glas., L.S.A.Lond., Bailbrook House, Bath.
1911. Martin, William Lewis, M.A., B.Sc., M.B., Ch.M.Edin. (*Certifying Physician in Lunacy, Edinburgh Parish Council*), 56, Bruntsfield Place, Edinburgh.
1910. Masson, Charles Armit, M.A., M.B., Ch.B.Aberd., Assistant Medical Superintendent, Renfrew District Asylum, Dykebar, Paisley.
1911. Mathieson, James Moir, M.B., Ch.B.Aber., Assistant Medical Officer, Wadsley Asylum, Sheffield.
1904. May, George Francis, M.D., C.M. (McGill), L.S.A., Winterton Asylum, Ferryhill, Durham.

1907. Meek, Andrew Alexander Robertson, M.B., Ch.B.Glas., 185, Dalmarnoch Road, Glasgow.
1890. Menzies, William F., M.D., B.Sc.Edin., M.R.C.P.Lond., Medical Superintendent, Stafford County Asylum, Cheddleton, near Leek.
1891. Mercier, Charles A., M.D.Lond., F.R.C.P., F.R.C.S.Eng., Lecturer on Insanity, Westminster Hospital; 34, Wimpole Street, W. (*Secretary Educational Committee, 1893-1905. Chairman do. from 1905.*) (PRESIDENT, 1908-9.)
1877. Merson, John, M.A., M.D.Aber., Medical Superintendent, Borough Asylum, Hull.
1871. Mickle, William Julius, M.D., F.R.C.P.Lond., 69, Linden Gardens, Bayswater, W. (PRESIDENT, 1896-7.)
1893. Middlemass, James, M.A., M.D., C.M., B.Sc.Edin., F.R.C.P., Medical Superintendent, Borough Asylum, Ryhope, Sunderland.
1910. Middlemiss, James Ernest, M.R.C.S.Eng., L.R.C.P.Lond., c/o H. Watson, Esq., 161, Manningham Lane, Bradford, Yorks.
1883. Miles, George E., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Hospital for the Insane, Rydalmere, New South Wales.
1887. Miller, Alfred, M.B. and B.C.Dubl., Medical Superintendent, Hatton Asylum, Warwick. (*Registrar since 1902.*)
1904. Miller, James Webster, M.B., Ch.B.Aberd., Wonford House, Exeter.
1911. Miller, Margaret Mair, M.B., Ch.B.Edin., Assistant Medical Officer, Northumberland County Asylum, Morpeth.
1893. Mills, John, M.B., B.Ch., and Diploma in Mental Diseases, R.U.I. District Asylum, Ballinasloe, Ireland.
1881. Mitchell, Richard Blackwell, M.D., C.M.Edin., Medical Supt., Midlothian District Asylum.
1911. Moffett, Thomas James Simpson, M.B., Ch.B.(R.U.I.), Assistant Medical Officer, Cumberland and Westmorland Asylum, Garlands, Carlisle.
1911. Moll, Jan. Marius, Doc. in Arts and Med, Utrecht Univ., L.M.S.S.A. Lond., 29, Bleyenburghade, Utrecht, Holland.
1910. Monnington, Richard Caldicott, M.D., Ch.B.Univ.Edin., D.P.H.Edin., Medical Superintendent, Laverstock House, Salisbury.
1878. Moody, Sir James M., M.R.C.S.Eng., L.R.C.P.&L.M.Edin., Medical Superintendent, County Asylum, Cane Hill, Coulsdon, Surrey.
1911. Moon, George Bassett, L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Assistant Medical Officer, County Association, Maidstone, Kent.
1885. Moore, Edw. E., M.D.Dubl., M.P.C., Medical Superintendent, District Asylum, Letterkenny, Ireland.
1899. Moore, Wm. D., M.D., M.Ch.(R.U.I.), Medical Superintendent, Holloway Sanatorium, Virginia Water, Surrey.
1892. Morrison, Cuthbert S., L.R.C.P. and L.R.C.S.Edin., Medical Superintendent, County and City Asylum, Burghill, Hereford.
1910. Morton, Hugh, M.B., Ch.B.Glasg., Assistant Physician, Nethenbank, 13, Aytoun Road, Pollokshields, Glasgow.
1896. Morton, W. B., M.D.Lond., Assistant Medical Officer, Wonford House, Exeter.
1896. Mott, F. W., M.D., B.S., F.R.C.P.Lond., F.R.S., 25, Nottingham Place, W.
1896. Mould, Gilbert E., M.R.C.S., L.R.C.P.Lond., The Grange, Rotherham, Yorks.
1897. Mould, Philip G., M.R.C.S.Eng., L.R.C.P.Lond., Overdale, Whitefield, Manchester.
1908. Muirhead, Winifred, L.R.C.P., L.R.C.S.Edin., Assistant Medical Officer, Royal Asylum, Morningside, Edinburgh.
1907. Mules, Bertha Mary, M.B., B.S.Durh., Court Hall, Kenton, S. Devon.
1897. Mumby, Bonner Harris, M.D.Aber., D.P.H.Cantab., Medical Superintendent, Borough Asylum, Portsmouth.
1911. Munro, William Thompson, M.B., C.B.Edin., Argyle and Bute District Asylum, Loch Gilphead.
1911. Muncaster, Anna Lilian, M.B., Ch.Edin., Assistant Medical Officer and Pathologist, Bangour Village, Uphall, N.B.

1893. Murdoch, James William Aitken, M.B., C.M.Glasg., Medical Superintendent, Berks County Asylum, Wallingford.
1910. Murphy, Edward Patrick Harnett, B.A., L.A.H.Dubl., "Erin," Bradford Road, Trowbridge, Wilts.
1905. Murrell, Christine Mary, M.D., B.S.Lond., Royal Free Hospital, 86, Porchester Terrace, Hyde Park, W.
1909. Myers, Charles Samuel, M.A., M.D.Cantab. (*University Lecturer in Experimental Psychology*), Great Shelford, Cambridgeshire.
1903. Navarra, Norman, M.R.C.S., L.R.C.P., City of London Mental Hospital, near Dartford, Kent.
1880. Neil, James, M.D.Aberd., M.P.C., Medical Superintendent, Warneford Asylum, Oxford.
1910. Neill, Alexander W., M.B., Ch.B.Glasg., Assistant Physician, 11, Air Crescent, Edinburgh.
1903. Nelis, William F., M.D.Durb., L.R.C.P.Edin., L.R.F.P.S.Glasg., Medical Superintendent, Newport Borough Asylum, Caerleon, Mon.
1911. Nelson, Henry Grattan Guinness, M.B., Ch.B.Edin., Southampton Hospital, Southampton.
1875. Newington, Alexander, M.B.Camb., M.R.C.S.Eng., Woodlands, Ticehurst.
1873. Newington, H. Hayes, F.R.C.P.Edin., M.R.C.S.Eng., The Gables, Ticehurst, Sussex. (*Chairman Parliamentary Committee, 1896-1904.*) (PRESIDENT, 1889.) (*Treasurer since 1894.*)
1909. Nicoll, James, M.D., Ch.M.Edin., D.P.H.Lond., Senior Assistant Medical Officer, Leavesden Asylum, King's Langley, R.S.O., Herts.
1869. Nicolson, David, C.B., M.D., C.M.Aber., M.R.C.P.Edin., F.S.A.Scot., 201, Royal Courts of Justice, Strand, W.C. (PRESIDENT, 1895-6.)
1893. Nobbs, Athelstane, M.D., C.M.Edin., Layton House, Putney, S.W.
1888. Nolan, Michael J., L.R.C.P.I., M.P.C., Medical Superintendent, District Asylum, Downpatrick.
1909. Norman, Hubert James, M.B., Ch.B.Edin., D.P.H.Edin., Assistant Medical Officer, Camberwell House Asylum, S.E.
1885. Oakshott, James A., M.D., M.Ch. (R.U.I.), Medical Superintendent, District Asylum, Waterford, Ireland.
1903. O'Doherty, Patrick, B.A., M.B., B.Ch. (R.U.I.), District Asylum, Omagh.
1904. O'Downey, Augustine Francis, L.R.C.P. & S. Edin. (Address uncommunicated.)
1901. Ogilvy, David, B.A., M.D., B.Ch., L.M.Dub., Senior Assistant Medical Officer, London County Asylum, Horton, nr. Epsom, Surrey.
1912. Ogilvie, Ian, M.B., Ch.B.Aberd., Assistant Medical Officer, District Asylum, Aberdeen.
1911. O'Hagan, John Vincent, L.R.C.P.&I.Irel., Seatown Place, Dundalk, Ireland.
1910. Oldershaw, George Francis, M.D., Ch.B.Liverp., D.P.H., Deputy Medical Officer, H. M. Prison; and 18, Walton Park, Liverpool.
1911. Oliver, Norman H., M.R.C.S., L.R.C.P.Lond., The Retreat, Richmond, Surrey.
1892. O'Mara, Francis, L.R.C.P.&S.I., District Asylum, Ennis, Ireland.
1886. O'Neill, Edward D., M.R.C.P.I., Medical Superintendent, The Asylum, Limerick.
1868. Orange, William, C.B., M.D.Heidelb., F.R.C.P.Lond., 11, Marina Court Bexhill-on-Sea. (PRESIDENT, 1883.)
1907. O'Reilly, Arthur Edward, L.R.C.S. & P.I., L.M., Prusha, Cape Colony.
1902. Orr, David, M.D., Ch.M.Edin., Pathologist, County Asylum, Prestwich, Lancs.
1910. Orr, James H. C., M.B., Ch.B.Edin., Rosslyn Lee Asylum, Midlothian.
1899. Osburne, Cecil A. P., F.R.C.S.Edin., L.R.C.P.Edin., The Grove, Old Catton, Norwich.

1890. Oswald, Landel R., M.B., Ch.M.Glasg., M.P.C., Physician Superintendent, Royal Asylum, Gartnavel, Glasgow.
1905. Paine, Frederick, M.R.C.S., L.R.C.P.Lond., Claybury Asylum, Woodford Bridge, Essex.
1907. Parker, James, L.R.C.S.&P. and L.M.Irel., Assistant Medical Officer, West Riding Asylum, Wakefield.
1898. Parker, William Arnot, M.B., Ch.M.Glasg., Medical Superintendent, Gartloch Asylum, Gartcosh, N.B.
1898. Pasmore, Edwin Stephen, M.D.Lond., M.R.C.P.Lond., Chelsham House, Chelsham, Surrey.
1899. Paton, Robert N., L.R.C.P., L.R.C.S.Edin., Medical Officer, H.M. Prison, Wormwood Scrubbs, London, W.
1899. Patrick, John, M.B., Ch.B. (R.U.I.), District Asylum, Belfast.
1892. Patterson, Arthur Edward, M.D., C.M.Aber., Senior Assistant Medical Officer, City of London Asylum, Dartford.
1905. Paul, Maurice Eden, M.D.Bru.x., M.R.C.S., L.R.C.P., Moorcroft, Parkstone, Dorset.
1907. Peachell, George Ernest, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Assistant Medical Officer, West Sussex County Asylum, Chichester.
1903. Pearce, Francis H., M.A., M.B., B.C.Cantab., M.R.C.S., L.R.C.P., Shirlett Sanatorium, Broseley, Shropshire.
1910. Pearn, Oscar Phillips Napier, M.R.C.S., L.R.C.P.Lond., L.S.A., Assistant Medical Officer, London County Asylum, Horton, Epsom.
1910. Pearson, Robert Walter Joseph, L.R.C.P.&S.E., L.F.P.S.Glasg., Assistant Medical Officer, London County Asylum, Claybury, Woodford Bridge.
1893. Perceval, Frank, M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, County Asylum, Prestwich, Manchester, Lancashire.
1911. Perdrau, Jean René, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., County Asylum, Herrison, Dorchester.
1911. Petrie, Alfred Alexander Webster, M.B., Ch.B.Edin., F.L.C.S.Edin., Assistant Medical Officer, London County Asylum, Bexley, Kent.
1878. Philipps, Sutherland Rees, M.D., C.M. Queen's Univ. Irel., F.R.G.S. 24, Iverna Gardens, Kensington, W.
1875. Philipson, Sir George Hare, M.D. and M.A.Cantab., F.R.C.P.Lond., 7, Eldon Square, Newcastle-on-Tyne.
1908. Phillips, John George Porter, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Assistant Physician, Bethlem Royal Hospital, Lambeth, S.E.
1910. Phillips, John Robert Parry, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, City Asylum, Bristol.
1906. Phillips, Nathaniel Richard, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, County Asylum, Abergavenny, Monmouthshire.
1905. Phillips, Norman Routh, M.D.Bru.x., M.R.C.S., L.R.C.P., St. Andrew's Hospital, Northampton.
1891. Pierce, Bedford, M.D.Lond., F.R.C.P., Medical Superintendent, The Retreat, York. (*Hon. Secretary N. and M. Division 1900-8.*)
1888. Pietersen, J. F. G., M.R.C.S., L.R.C.P.Lond., Ashwood House, Kingswinford, near Dudley, Stafford.
1896. Planck, Charles, M.A.Camb., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Brighton County and Borough Asylum, Haywards Heath.
1912. Plumer, Edgar Curnow, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Farnham House, Finglas, Dublin.
1889. Pope, George Stevens, L.R.C.P. & L.R.C.S.Edin., L.R.F.P.&S.Glasg., Medical Superintendent, Somerset and Bath Asylum, "Westfield," near Wells, Somerset.
1909. Potter, Scott, L.R.C.S.&P.Irel., Fisherton House, Salisbury.
1876. Powell, Evan, M.R.C.S.Eng., L.S.A., Medical Superintendent, Borough Lunatic Asylum, Nottingham.
1910. Powell, James Farquharson, M.R.C.S., L.R.C.P., D.P.H.Lond., 4 Huron Road, Balham, S.W.
1908. Prentice, Reginald Wickham, L.M.S.S.A.Lond., Beauworth Manor, Alresford, Hants.

1904. Pringle, Archibald Douglas, M.B., Ch.B.Aberd., Government Asylum, Pietermaritzburg, Natal, South Africa.
1875. Pringle, Henry T., M.D.Glasg., Hawtree, Ferndown, Wimborne.
1901. Pugh, Robert, M.D., Ch.B.Edin., Medical Superintendent, Brecon and Radnor Asylum, Talgarth, S. Wales.
1904. Quin, Henry C. E., L.R.C.P., L.R.C.S.Edin.,
1904. Race, John Percy, M.R.C.S., L.R.C.P., L.S.A., The Retreat, Witham, Essex.
1908. Rains, George Hooper, L.S.A.Lond., The Elms, Stapleton, Bristol.
1899. Rainsford, F. E., M.D., B.A.Dubl., Resident Physician, Stewart Institute, Palmerston, co. Dublin.
1894. Rambaut, Daniel F., M.A., M.D.Univ. Dubl., Salop and Montgomery Asylum, Bicton Heath, Shrewsbury.
1910. Rankine, Surg. Roger Aiken, R.N., M.B., B.S.Lond., M.R.C.S., L.R.C.P., H.M.S. "King Edward VII," Third Division, Home Fleet.
1889. Raw, Nathan, M.D., B.S.Durh., L.S.Sc., F.R.C.S.Edin., M.R.C.P.Lond., 66, Rodney Street, Liverpool.
1893. Rawes, William, M.D.Durh., F.R.C.S.Eng., Medical Superintendent, St. Luke's Hospital, Old Street, London, E.C.
1870. Rayner, Henry, M.D.Aberd., M.R.C.P.Edin., 16, Queen Anne Street, London, W. (PRESIDENT, 1884.) (*General Secretary*, 1878-89.) (*Co-Editor of Journal since 1895.*)
1903. Read, George F., L.R.C.S., L.R.C.P.Edin., Hospital for the Insane, New Norfolk, Tasmania.
1899. Redington, John, F.R.C.S.&L.R.C.P.I., Assistant Medical Officer and Pathologist, Richmond Asylum, Dublin.
1911. Reeve, Ernest Frederick, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Senior Assistant Medical Officer, County Asylum, Rainhill, Lancs.
1911. Reid, Daniel McKinley, M.B., Ch.B.Glasg., 2, Royal Terrace, Paisley.
1910. Reid, William, M.A.St. And., M.B., Ch.B., Senior Assistant Medical Officer, Burntwood Asylum, Lichfield.
1887. Reid, William, M.D.Aberd., Physician Superintendent, Royal Asylum, Aberdeen.
1886. Revington, George, M.A., M.D., B.Ch.Dubl., M.P.C., Medical Superintendent, Central Criminal Asylum, Dundrum, Ireland.
1907. Reynolds, Ernest Septimus, B.Sc.Vict., M.D., F.R.C.P.Lond., 2, St. Peter's Square, Manchester.
1899. Rice, David, M.D.Bru., M.R.C.S., L.R.C.P., Medical Superintendent, City Asylum, Hillesdon, Norwich.
1897. Richard, William J., M.A., M.B., Ch.M.Glasg., Medical Officer, Govan Parochial Asylum, Merryflats, Govan.
1899. Richards, John, M.B., Ch.M.Edin., F.R.C.S.E., Medical Superintendent, Joint Counties Asylum, Carmarthen.
1907. Rivers, William Gregory, M.B., Ch.B.Edin., Assistant Medical Officer, Cornwall County Asylum, Bodmin.
1911. Robarts, Henry Howard, M.D., Ch.B.Edin., D.P.H.Glasg., 1, Wemyss Place, Haddington, Scotland.
1903. Roberts, Norcliffe, M.D., B.S.Durh., London County Asylum, Cane Hill, Coulsdon, Surrey.
1905. Robertson, Constance C., M.D., B.S.Durh., Semmercote, Darlington.
1887. Robertson, Geo. M., M.B., F.R.C.P.Edin., Physician-Superintendent, Royal Asylum, Morningside, Edinburgh.
1908. Robertson, George Dunlop, L.R.C.S.&P.Edin., Assistant Medical Officer, District Asylum, Hartwood, Lanark.
1910. Robertson, Jane I., M.B., Ch.B.Glasg., c/o Marvon, 31, Tacovrie Terrace, Glasgow.
1895. Robertson, William Ford, M.D., C.M.Edin., 48, Northumberland Street, Edinburgh.

1905. Robertson-Milne, Major Charles John, M.B., Ch.M.Aberd., Superintendent, Bengal Central Asylum, Berhampore, Bengal.
1900. Robinson, Harry A., M.D., Ch.B.Vict., 56, West Derby Street, Liverpool.
1911. Robinson, John Hargreaves, L.A.H.Dubl. (*Assistant Medical Officer, County and City Asylum, Powick, Worcester*); and 130, Sussex Road, Southport.
1911. Robson, Lieut. Hubert Alan Hirst, I.M.S., M.R.C.S., L.R.C.P.Lond., c/o Messrs. Grindlay, Groome, Bombay, India.
1908. Rodgers, Frederick Millar, M.B., Ch.B.Vict., D.P.H., Senior Medical Officer, County Asylum, Winwick, Lancs.
1908. Rolleston, Charles Frank, B.A., M.B., Ch.B., B.A.O.Dubl., Assistant Medical Officer, County of London, Manor Asylum, Epsom.
1895. Rolleston, Lancelot W., M.B., B.S.Durh., Medical Superintendent, Middlesex County Asylum, Napsbury, near St. Albans.
1879. Ronaldson, J. B., M.D.St.And., F.R.C.S. & L.R.C.P.Edin., D.P.H., Thirlestane, Colinton, Midlothian.
1879. Roots, William H., M.R.C.S.Eng., Canbury House, Kingston-on-Thames.
1899. Rorie, George Arthur, M.D., Ch.B.Edin., Senior Assistant Medical Officer, Dorset County Asylum, Dorchester.
1888. Ross, Chisholm, M.D.Syd., M.B., Ch.M.Edin., 147, Macquarie Street, Sydney, New South Wales.
1910. Ross, Donald, M.B., Ch.B.Edin., Assistant Physician, Royal Asylum, Morningside, Edinburgh.
1905. Ross, Sheila Margaret, M.D., Ch.B.Edin., Assistant Medical Officer of Health, 42, Cavill Drive, Fallowfield, Manchester.
1899. Rotherham, Arthur, M.A., M.B., B.C.Cantab., Medical Superintendent, Darenth Asylum, Dartford, Kent.
1906. Rowan, Marriott Logan, B.A., M.D., (R.U.I.), Assistant Medical Officer, Derby County Asylum, Mickleover.
1884. Rowe, Edmund L., L.R.C.P.&S.Edin., Medical Superintendent, Borough Asylum, Ipswich.
1883. Rowland, E. D., M.B., Ch.M.Edin., The Public Hospital, George Town, Demerara, British Guiana.
1902. Rows, Richard Gundry, M.D.Lond., M.R.C.S., L.R.C.P., Pathologist County Asylum, Lancaster.
1877. Russell, Arthur P., M.B., M.R.C.P.Edin., The Lawn, Lincoln.
1907. Rutherford, Henry Richard Charles, L.R.C.P.&S.Irel., L.M., St. Patrick's Hospital, James's St., Dublin.
1896. Rutherford, James Mair, M.B., Ch.M., F.R.C.P.Edin., Brislington House, Bristol.
1907. Rutherford, James Whigham, L.R.C.P.&S.L., L.M., Assistant Medical Officer, Catford Asylum, Taunton.
1896. Rutherford, Robert Leonard, M.D. (R.U.I.), Medical Superintendent, Digby's Asylum, Exeter.
1908. Rutledge, W. E., M.R.C.S., L.R.C.P.Lond., County Asylum, Powick, Worcester.
1902. Sall, Ernest Frederick, M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Borough Asylum, Canterbury.
1908. Samuels, William Frederick, L.M.&L.S.Dubl., Medical Superintendent, Central Asylum, Tangong, Rambutan, Federated Malay States.
1894. Sankey, Edward H. O., M.A., M.B., B.C.Cantab., Resident Medical Licensee, Boreatton Park Licensed House, Baschurch, Salop.
- * Sankey, R. H. Heurtley, M.R.C.S.Eng., 3, Marston Ferry Road, Oxford.
1912. Sargeant, John Noel, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Medical Superintendent, Newland House, Tooting Bec Road, S.W.
1873. Savage, Sir Geo. H., M.D.&F.R.C.P.Lond., 26, Devonshire Place, W. (*Late Editor of Journal.*) (PRESIDENT, 1886.)
1906. Scanlan, John J., L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., D.P.H., Medical Superintendent, Twyford Abbey, Willesden, N.W.

1896. Scott, James, M.B., Ch.M.Edin., Governor's House, H.M. Prison, Holloway, N.
1889. Scowcroft, Walter, M.R.C.S., Medical Superintendent, Royal Lunatic Hospital, Cheadle, near Manchester.
1911. Scroope, Geoffrey, M.B., B.Ch.Dub., Assistant Medical Officer, Central Asylum, Dundrum.
1880. Seccombe, George S., M.R.C.S., L.R.C.P., c/o Messrs. H. S. King and Co., 65, Cornhill, E.C.
1879. Seed, William Hy., M.B., Ch.M.Edin., The Poplars, 110, Waterloo Road, Ashton-on-Ribble, Preston.
1906. Sephton, Robert Poole, B.A.Cantab., M.R.C.S.Eng., L.R.C.P.Lond., County Lunatic Asylum, Lancaster.
1882. Seward, William J., M.B.Lond., M.R.C.S., 15, Chandos Avenue, Oakleigh Park, N.
1901. Shaw, B. Henry, M.B., B.Ch., B.A.O.(R.U.I.), Assistant Medical Officer, County Asylum, Stafford.
1909. Shaw, Capt. William Samuel J., M.B., B.Ch. (R.U.I.), *I.M.S.*, c/o Messrs. Grindlay & Co., 54, Parliament Street, S.W.
1905. Shaw, Charles John, M.D., Ch.B., F.R.C.P.E., Medical Superintendent, Argyll and Bute Asylum, Lochgilphead.
1891. Shaw, Harold B., B.A., M.B., D.P.H.Camb., Medical Superintendent, Isle of Wight County Asylum, Whitcroft, Newport, Isle of Wight.
1904. Shaw, Patrick, L.R.C.P.&S.Edin., Medical Officer, Hospital for the Insane, Kew, Victoria, Australia.
- Shaw, T. Claye, B.A., M.D.Lond., F.R.C.P.Lond., 30, Harley Street, W.
1882. Sheldon, Thomas S., M.B.Lond., M.R.C.S., Medical Superintendent, Cheshire County Asylum, Parkside, Macclesfield.
1909. Shepherd, George Ferguson, F.R.C.S., L.R.C.P.Irel., D.P.H., 9, Ogle Terrace, South Shields.
1900. Shera, John E. P., M.D.Bru., L.R.C.P.&S.Irel., Somerset County Asylum, Wells, Somerset.
1912. Sheridan, Gerald O'Reilly, M.B., B.Ch. (R.U.I.), Assistant Medical Officer, Portrane Asylum, Dublin.
1877. Shuttleworth, George E., M.D.Heidelb., M.R.C.S. and L.S.A.Eng., B.A. Lond., Parkholme, East Sheen, S.W. (*Late Medical Superintendent, Royal Albert Asylum, Lancaster.*)
1901. Simpson, Alexander, M.A., M.D.Aber., Medical Superintendent, County Asylum, Winwick, Newton-le-Willows, Lancashire.
1905. Simpson, Edward Swan, M.B., Ch.B.Edin., East Riding Asylum, Beverley, Yorks.
1911. Simpson, John C., M.B., Ch.B.Edin., Fernbank, Wick, Caithness, N.B.
1888. Sinclair, Eric, M.D.Glasg., Richmond Terrace, Demain, Sydney, N.S.W.
1891. Skeen, James Humphry, M.B., Ch.M.Aber., Medical Superintendent, Kirklands Asylum, Bothwell.
1898. Skeen, William St. John, M.B., Ch.M.Aberd., County Asylum, Winterton, Ferryhill, Durham.
1900. Skinner, Ernest W., M.D., Ch.M.Edin., Mansfield, Rye, Sussex.
1901. Slater, George N. O., M.D.Lond., M.R.C.S., L.R.C.P., Assistant Medical Officer, Essex County Asylum, Brentwood.
1897. Smalley, Herbert, M.D.Durh., L.R.C.P., M.R.C.S., Prison Commission, Home Office, Whitehall, S.W.
1907. Smith, Ch. Mollyson, M.B., Ch.B.Aberd., Assistant Medical Officer, County Asylum, Prestwich, Manchester.
1910. Smith, Gayton Warwick, M.D.Lond., B.S.Dunelm, D.P.H.Cantab., M.R.C.S., L.R.C.P., Assistant Medical Officer, Middlesex County Asylum, Tooting, S.W.
1905. Smith, George William, M.B., Ch.M.Edin., Holloway Sanatorium, Virginia Water, Surrey.
1907. Smith, Henry Watson, M.B., Ch.B.Aberd., Medical Superintendent, Lebanon Hospital for the Insane, Asfurujeh, near Beyrout, Syria.

1899. Smith, John G., M.D., Ch.M.Edin., Herts County Asylum, Hill End, St. Albans, Herts.
1885. Smith, R. Percy, M.D., B.S.Lond., F.R.C.P., M.P.C., 36, Queen Anne Street, Cavendish Square, W. (*General Secretary*, 1896-7. *Chairman Educational Committee*, 1899-1903). (PRESIDENT, 1904-5.)
1911. Smith, Thomas Waddelow, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Devon County Asylum, Exminster.
1884. Smith, W. Beattie, F.R.C.S.Edin., L.R.C.P.Edin., 4, Collins Street, Melbourne, Victoria.
1903. Smith, William Maule A., M.D., Ch.B.Edin., M.R.C.P.Edin., Senior Assistant Medical Officer, Worcester County Asylum, Barnsley Hall, Bromsgrove.
1901. Smyth, Robt. B., M.A., M.B., Ch.B.Dubl., Senior Assistant Medical Officer, County Asylum, Gloucester.
1899. Smyth, Walter S., M.B., B.Ch. (R.U.I.), Assistant Medical Officer, County Asylum, Antrim.
1885. Soutar, James Grieg, M.B., Ch.M.Edin., Medical Superintendent, Barnwood House, Gloucester. (PRESIDENT-ELECT, 1911-12.)
1906. Spark, Percy Charles, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, London County Asylum, Banstead, Surrey.
1883. Spence, John Buchan, M.B., Ch.M.Edin., L.R.C.P.&S., The Asylum, Colombo, Ceylon.
1875. Spence, J. Beveridge, M.D., M.C. Queen's Univ., Medical Superintendent, Burntwood Asylum, near Lichfield. (*First Registrar*, 1892-1899; *Chairman Parliamentary Committee since* 1910.) (PRESIDENT, 1899-1900.)
1891. Stansfield, T. E. K., M.B., Ch.M.Edin., Medical Superintendent, London County Asylum, Bexley, Baldwyn's Park, Bexley, Kent.
1901. Starkey, William, M.B., B.Ch., B.A.O.Roy. Univ. Irel., Assistant Medical Officer, Lancashire County Asylum, Prestwich, near Manchester.
1907. Steele, Patrick, M.D., Ch.B.Edin., Assistant Medical Officer, Bangour Village, Dechmont, Linlithgowshire.
1898. Steen, Robert H., M.D.Lond., Medical Superintendent, City of London Asylum, Stone, Dartford. (*Hon. Sec. S.E. Division*, 1905-10.)
1909. Steward, Sidney John, M.D., B.C.Cantab., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, 8, The Court, Bury Fields, Guildford.
1868. Stewart, James, F.R.C.P.Edin., L.R.C.S.Irel., "Gortnasheila," 28, Glebe Road, Barnes, S.W.
1887. Stewart, Rothsay C., M.R.C.S.Eng., L.S.A., Leicestershire and Rutland Asylum, Narborough, near Leicester.
1905. Stilwell, Henry Francis, L.R.C.P.&S.E., The Hall, Headcorn, Kent.
1899. Stilwell, Reginald J., M.R.C.S., L.R.C.P., Moorcroft House, Hillingdon, Middlesex.
1897. Stoddart, William Henry Butter, M.D., B.S., F.R.C.P.Lond., M.R.C.S.Eng., Resident Physician and Superintendent, Bethlem Royal Hospital, London, S.E. (*Hon. Sec. Educational Committee since* 1908.)
1909. Stokes, Frederick Ernest, M.B., Ch.B.Glasg., D.P.H.Cantab., Assistant Medical Officer, Borough Asylum, Portsmouth.
1905. Strathearn, John, M.D., Ch.B.Glasg., 9, University Avenue, Glasgow.
1903. Stratton, Percy Haughton, M.R.C.S., L.R.C.P.Lond., The Royal Societies Club, St. James's Street, S.W.
1885. Street, C. T., M.R.C.S., L.R.C.P., Haydock Lodge, Ashton, Newton-le-Willows, Lancashire.
1908. Stuart, Francis Arthur Knox, B.A.Cantab., L.S.A.Lond., Assistant Medical Officer, West Sussex Asylum, Chichester.
1909. Stuart, Frederick J., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Northampton County Asylum, Berrywood.
1900. Sturrock, James Prain, M.A.St.And., M.D., C.M.Edin., H.M. Prison, Perth, N.B.
1886. Suffern, Alex. C., M.D., M.Ch. (R.U.I.), Medical Superintendent, Ruberry Hill Asylum, near Bromsgrove, Worcestershire.
1894. Sullivan, William C., M.D. (R.U.I.), 440, Camden Road, N.
1898. Sutcliffe, John, J.P., M.R.C.S., L.R.C.P., Royal Asylum, Cheadle, near Manchester.

1910. Sutherland, Joseph Roderick, M.B., Ch.B.Glasg., M.R.C.S., L.R.C.P. Lond., 21, Hamilton Terrace, Partick, Glasgow.
1877. Swanson, George I., M.D.Edin., The Pleasaunce, Heworth Moor, York.
1908. Swift, Eric W. D., M.B.Lond., Medical Superintendent, Orange River Colony Govt. Asylum, Bloemfontein.
1901. Sykes, Arthur, M.R.C.S., L.R.C.P., Oak Villas, Barkerhouse Road, Nelson, Lancs.
1857. Tate, William B., M.D.Aber., M.R.C.P.Lond., M.R.C.S.Eng., Medical Superintendent, Lunatic Hospital, The Coppice, Nottingham.
1908. Tattersall, John, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, London County Asylum, Hanwell, W.
1910. Taylor, Arthur Loudoun, B.Sc., M.B., Ch.B.Edin., 7, Royal Crescent, Edinburgh.
1897. Taylor, Frederic Ryott Percival, M.D., B.S.Lond., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, East Sussex Asylum, Hellingly.
1908. Thomas, Joseph D., B.A., M.B., B.C.Cantab., Northwoods House, Winterbourne, Bristol.
1911. Thomas, William Rees, M.D., B.S.Lond., Pathologist, East Sussex Asylum, Hellingly.
1904. Thompson, Alexander D., M.B., Ch.B.Glasg., Fulbourn Asylum, Cambridge.
1880. Thomson, David G., M.D., C.M.Edin., Medical Superintendent, County Asylum, Thorpe, Norfolk.
1903. Thomson, Herbert Campbell, M.D., F.R.C.P.Lond., Assist. Physician Middlesex Hospital, 34, Queen Anne Street, W.
1905. Thomson, James Hutcheon, M.B., Ch.B.Aberd., Powick Asylum, Worcester.
1905. Tidbury, Robert, M.D., M.Ch. (R.U.I.), L.M., Heathlands, Foxhall Road, Ipswich.
1901. Tighe, John V. G. B., M.B., B.Ch., B.A.O.Irel., North Riding Asylum, Clifton, Yorks.
1903. Topham, J. Arthur, B.A.Cantab., M.R.C.S.&P.Lond., County Asylum, Chartham, Kent.
1896. Townsend, Arthur A. D., M.D., B.Ch.Birm., M.R.C.S., L.R.C.P., Assistant Medical Officer, Hospital for Insane, Barnwood House, Gloucester.
1904. Treadwell, Oliver Fereira Naylor, M.R.C.S.Eng., L.S.A., H. M. Prison, Parkhurst, I. of W.
1903. Tredgold, Alfred F., M.R.C.S., L.R.C.P., 6, Dapdune Crescent, Guildford, Surrey.
1881. Tuke, Charles Molesworth, M.R.C.S.Eng., Chiswick House, Chiswick.
1888. Tuke, John Batty, jun., M.D., F.R.C.P.Edin., Resident Physician, Saughton Hall, Edinburgh; Linden Lodge, Loanhead, Midlothian.
1885. Tuke, T. Seymour, M.A., M.B., B.Ch.Oxon., M.R.C.S.E., Chiswick House, Chiswick, W.
1877. Turnbull, Adam Robert, M.B., C.M.Edin., Medical Superintendent, Fife and Kinross District Asylum, Cupar. (*Hon. Secretary for Scottish Division, 1894-1901.*) (*PRESIDENT-ELECT, 1909-10.*)
1906. Turnbull, Peter Mortimer, M.B., B.Ch.Aberd., Tooting Bec Asylum, Tooting, S.W.
1909. Turnbull, Robert Cyril, M.D.Lond., M.R.C.S., L.R.C.P., Senior Assistant Medical Officer, Essex County Asylum, Brentwood.
1889. Turner, Alfred, M.D., Ch.M.Edin., Plympton House, Plympton, S. Devon.
1906. Turner, Frank Douglas, M.B.Lond., M.R.C.S., L.R.C.P., Medical Officer, Royal Eastern Counties Institution, Colchester.
1890. Turner, John, M.B., Ch.M.Aberd., Medical Superintendent, Essex County Asylum, Brentwood.
1878. Urquhart, Alex. Reid, M.D., F.R.C.P.E., Physician Superintendent, James Murray's Royal Asylum, Perth. (*Co-Editor of Journal since 1894.*) (*Hon. Sec. for Scottish Division, 1886-94.*) (*PRESIDENT, 1898-9.*)
1904. Vincent, George A., M.B., B.Ch.Edin., Assistant Medical Superintendent, St. Ann's Asylum, Trinidad, B.W.I.

1894. Vincent, William James, M.B., B.S.Durh., M.R.C.S., L.R.C.P., Medical Superintendent, Wadsley Asylum, near Sheffield.
1911. Waldron, Ethel Annie, M.B., Ch.B.Birm., Assistant Medical Officer, West Riding Asylum, Wakefield.
1896. Walker, William F., L.R.C.S.&L.M.Edin., L.S.A.Lond., Plas-yn-Dinas, Dinas Mawddwy, Merionethshire.
1908. Wallace, John Andrew Leslie, M.D., Ch.B.Edin., M.P.C., State Hospital for the Insane, Iladesville, Sydney, N.S.W.
1899. Warnock, John, M.D., Ch.M., B.Sc.Edin., Abassia, nr. Cairo, Egypt.
1910. Waters, John Patrick, M.B., Ch.B., B.A.O. (R.U.I.), Assistant Medical Officer, County Asylum, Suffolk.
1895. Waterston, Jane Elizabeth, M.D.Bru., L.R.C.P.I., L.R.C.S.Edin., 85, Parliament Street, Box 78, Cape Town, South Africa.
1902. Watson, Frederick, M.B., Ch.M.Edin., The Grange, East Finchley, London, N.
1891. Watson, George A., M.B., Ch.M.Edin., M.P.C., Lyons House, Rainhill, Liverpool.
1908. Watson, H. Ferguson, L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., Assistant Medical Supt., Renfrew District Asylum, Dykebar, Paisley, N.B.
1885. Watson, William Riddell, L.R.C.S. and L.R.C.P.Edin., Govan District Asylum, Hawkhead, Paisley.
1910. Watson, William Scott, M.B., Ch.B.Edin., c/o Mental Hospital Dept., Government Buildings, Wellington, New Zealand.
1911. Webber, Leonard Mortis, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Surrey County Asylum, Netherne, Meratham.
1880. West, George Francis, L.R.C.P.Edin., Medical Superintendent, District Asylum, Kilkenny, Ireland.
1911. White, Edward Barton, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Cardiff City Mental Hospital, Whitchurch.
1884. White, Ernest William, M.B.Lond., M.R.C.P.Lond., Betley House, nr. Shrewsbury. (*Hon. Sec. South-Eastern Division, 1897-1900.*) (*Chairman Parliamentary Committee, 1904-7.*) (*PRESIDENT 1903-4.*)
1911. White, H. Wilson, M.B., B.Ch. (R.U.I.), Assistant Medical Officer, London County Asylum, Long-Grove, Epsom.
1905. White, Robert George, M.A., M.B., B.Sc., Ch.B.Glasg., Pathological Department, School of Medicine, Cairo, Egypt.
1905. Whittington, Richard, M.A., M.D.Oxon., M.R.C.S., L.R.C.P., Downford, Montpelier Road, Brighton.
1889. Whitwell, James Richard, M.B., Ch.M.Edin., Medical Superintendent, Suffolk County Asylum, Melton Woodbridge.
1903. Wigan, Charles Arthur, M.D.Durh., M.R.C.S.Eng., Deepdene, Portishead, Somerset.
1883. Wigglesworth, Joseph, M.D., F.R.C.P.Lond., Rainhill Asylum, Lancashire. (*PRESIDENT, 1902-3.*)
1895. Wilcox, Arthur William, M.D., Ch.M.Edin., 49, Albert Bridge Road, S.W.
1900. Wilkinson, H. B., M.R.C.S., L.R.C.P., Assistant Medical Officer Plymouth Borough Asylum, Blackadon, Ivybridge, South Devon.
1911. Will, John Henderson, M.B., Ch.B.Aberd., Assistant Medical Officer, Essex County Asylum, Brentwood, Essex.
1887. Will, John Kennedy, M.A., M.D., Ch.M.Aberd., Bethnal House, Cambridge Road, N.E.
1907. Williams, Charles E. C., M.A., M.D., B.Ch.Dubl., Assistant Medical Officer, Holloway Sanatorium, Virginia Water, Surrey.
1905. Williams, David John, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, The Asylum, Kingston, Jamaica.
1909. Williamson, George Scott, L.R.C.S.&P.Edin., Pathologist, General Hospital, Bristol.
1904. Wilson, Geoffrey Plumptre, M.R.C.S., L.R.C.P.Lond., Kesteven Asylum, Sleaford, Lincs.
1897. Winder, W. H., M.R.C.S., L.R.C.P.Lond., D.P.H.Cantab., Deputy Medical Officer, H.M. Convict Prison, Aylesbury.

1875. Winslow, Henry Forbes, M.D.Lond., M.R.C.P.Lond., 29, Belsize Square, S. Hampstead, N.W.; and Little Combe, Charlton.
1899. Wolseley-Lewis, Herbert, M.D.Bru.x., F.R.C.S.Eng., Medical Superintendent, Kent County Asylum, Barming Heath, Maidstone. (*Secretary Parliamentary Committee since 1907*).
1904. Wood, Martin Stanley, M.B., Ch.B.Vict., Royal Asylum, Chendle, Cheshire.
1869. Wood, T. Outterson, M.D.Durh., M.R.C.P.Lond., F.R.C.P., F.R.C.S. Edin., 40, Margaret Street, Cavendish Square, W. (PRESIDENT, 1905-6.)
1885. Woods, J. F., M.D.Durh., M.R.C.S., 7, Harley Street, Cavendish Square, W.
1900. Worth, Reginald, M.B., B.S.Durh., M.R.C.S., L.R.C.P., Middlesex Asylum, Tooting, S.W.
1862. Yellowlees, David, LL.D.Glas., M.D.Edin., F.R.F.P.S.Glasg., 6, Albert Gate, Down Hill, Glasgow. (PRESIDENT, 1890.)
1910. Younger, Edward George, M.D.Bru.x., M.R.C.P.Lond., M.R.C.S., L.S.A., Physician to the Finsbury Dispensary, 2, Mecklenburgh Square, W.C.

ORDINARY MEMBERS	...	...	...	...	...	690
HONORARY MEMBERS	...	...	...	...	...	34
CORRESPONDING MEMBERS	...	...	...	...	...	19
Total						743

Members are particularly requested to send changes of address, etc., to Dr. C. Hubert Bond, the Honorary General Secretary, 11, Chandos Street, Cavendish Square, London, W., and in duplicate to the Printers of the Journal, Messrs. Adlard and Son, 23, Bartholomew Close, London, E.C.

OBITUARY.

Honorary Member.

1891. O'Farrell, Sir G. P., M.A., M.D.Univ. Dubl., Inspector of Lunatics in Ireland, The Croft, Oxshott, Surrey.

Members.

1896. Beamish, George, L.R.C.S.I., L.R.C.P.E., L.M., Hillcrest, Kingsdown, Deal.
1857. Blanford, George Fielding, M.D.Oxon., F.R.C.P.Lond., Woodlands, Camden Park, Tunbridge Wells. (PRESIDENT, 1877).
1906. Huxley, Charles Rodney, L.R.C.P.&S.Edin., L.F.P.S.Glas., Kent House Road, New Beckenham, Kent.
1866. Jackson, J. Hughlings, M.D.St. And., F.R.C.P.Lond., F.R.S., Physician to the Hospital for Epilepsy and Paralysis, etc., 3, Manchester Square, London, W.
1859. Lindsay, James Murray, M.D.St. And., F.R.C.S.&P.Edin., 53, Victoria Road, Aldershot. (PRESIDENT, 1893).
1905. Ridley, Edward Hope, M.D.Edin., The Asylum, Portsmouth.
1899. Rorie, James, M.D.Edin., L.R.C.S.Edin., 4, Roxburgh Terrace, West Park Road, Dundee. (*Hon. Secretary for Scottish Division, 1861-69.*)
1895. Sutherland, John Francis, M.D.Edin., Deputy Commissioner in Lunacy, Scotsbrann Road, Tain, Scotland.
1902. Trevelyan, Edmund Fauriel, B.Sc., M.D.Lond., F.R.C.P.Lond., M.R.C.S., Assistant Physician to the Leeds General Infirmary, 40, Park Square, Leeds.
1884. Walker, Edw., B.C., M.D., C.M.Edin., Hensleigh Cottage, Tiverton, Devon.
1872. Whitcombe, Edmund Banchs, M.Sc., M.B., B.Ch.Birm., M.R.C.S.Eng., Medical Superintendent, Winson Green Asylum, Birmingham. (PRESIDENT, 1891.)

List of those who have passed the Examination for the Certificate of Efficiency in Psychological Medicine, entitling them to append M.P.C. (Med.-Psych. Certif.) to their names.

- | | |
|---------------------------------|---------------------------|
| Adamson, Robert O. | Conry, John. |
| Adkins, Percy, R. | Cook, William Stewart. |
| Ainley, Fred Shaw. | Cooper, Alfred J. S. |
| Ainslie, William. | Cope, George Patrick. |
| Alcock, B. J. | Corner, Harry. |
| Alexander, Edward H. | Cotton, William. |
| Anderson, A. W. | Couper, Sinclair. |
| Anderson, Bruce Arnold. | Cowan, John J. |
| Anderson, John. | Cowie, C. G. |
| Andriezen, W. | Cowie, George. |
| Armour, E. F. | Cowper, John. |
| Attegalie, J. W. S. | Cox, Walter H. |
| Aveline, H. T. S. | 8 Craig, M. |
| Ballantyne, Harold S. | Cram, John. |
| Barbour, William. | Crills, G. H. |
| Barker, Alfred James Glanville. | Cross, Edward John. |
| Bashford, Ernest Francis. | Cruikshank, George. |
| Bazalgette, S. | Cullen, George M. |
| Begg, William. | Cunningham, James F. |
| Belben, F. | Dalgetty, Arthur B. |
| Bird, James Brown. | Davidson, Andrew. |
| Blachford, J. Vincent. | Davidson, William. |
| Black, E. J. | 6 Dawson, W. R. |
| Black, Robert S. | De Silva, W. H. |
| Black, Victor. | 11 Devine, H. |
| Blackwood, John. | Distin, Howard. |
| Blandford, Henry E. | Dixon, J. F. |
| 7 Bond, C. Hubert. | Donald, Wm. D. D. |
| Bond, R. St. G. S. | Donaldson, R. L. S. |
| Bowlan, Marcus M. | Donellan, James O'Connor. |
| Boyd, James Paton. | Douglas, A. R. |
| Bradley, J. T. | Downey, Augustine. |
| Bristowe, Hubert Carpenter. | Drummond, Russell J. |
| Brodie, Robert C. | Eager, Richard. |
| Brough, C. | Eames, Henry Martyn. |
| Brown, William. | Earle, James H. |
| Browne, Hy. E. | East, W. Norwood. |
| Bruce, John. | Easterbrook, Charles C. |
| Bruce, Lewis C. | Eden, Richard A. S. |
| Brush, S. C. | Edgerley, S. |
| Bulloch, William. | Edwards, Alex. H. |
| Calvert, William Dobree. | Elkins, Frank A. |
| Cameron, James. | Ellis, Clarence J. |
| Campbell, Alex Keith. | English, Edgar. |
| Campbell, Alfred W. | Eustace, J. N. |
| Campbell, Peter. | Eustace, Henry Marcus. |
| Carmichael, W. J. | Evans, P. C. |
| Carruthers, Samuel W. | Ewan, John A. |
| Carter, Arthur W. | Ezard, Ed. W. |
| Chambers, James. | Falconer, A. R. |
| Chapman, H. C. | Falconer, James F. |
| Christie, William. | Farquharson, Wm. Fredk. |
| Clarke, Robert H. | Fennings, A. A. |
| Clayton, Frank Herbert A. | Ferguson, Robert. |
| Clayton, Thomas M. | Findlay, G. Landsborough. |
| Clinch, Thomas Aldous. | Fitzgerald, Gerald. |
| Coles, Richard A. | Fleck, David. |
| Collie, Frank Lang. | Fortune, J. |
| Collier, Joseph Henry. | Fox, F. G. T. |
| Conolly, Richard M. | Fraser, Donald Allan. |

- Fraser, Thomas.
 Frederick, Herbert John.
 Gaudin, Francis Neel.
 Gawn, Ernest K.
 Gemmell, William.
 Genney, Fred. S.
 Gibb, H. J.
 Gibson, Thomas.
 Giles, A. B.
 Gill, J. Macdonald.
 Gilmour, John R.
 Goldie, E. M.
 Goldschmidt, Oscar Bernard.
 Goodall, Edwin.
 Graham, Dd. James.
 Graham, F. B.
 Grainger, Thomas.
 Grant, J. Wemyss.
 Grant, Lacklan.
 Gray, Alex. C. E.
 Gray, Theodore G.
 Griffiths, Edward H.
 Hall, Harry Baker.
 Halsted, H. C.
 Haslam, W. A.
 Haslett, William John Handfield.
 Hassell, Gray.
 Hector, William.
 Henderson, Jane B.
 Henderson, P. J.
 Hennan, George.
 Hewat, Matthew L.
 Hewitt, D. Walker.
 Hicks, John A., jun.
 Hitchings, Robert.
 Holmes, William.
 Horton, James Henry.
 Hotchkis, R. D.
 Howden, Robert.
 Hughes, Robert.
 Hunter, G. T. C.
 Hutchinson, P. J.
 2 Hyslop, Thos. B.
 Ingram, Peter R.
 Jeffery, G. R.
 Jagannadhan, Annie W.
 Johnston, John M.
 Kelly, Francis.
 Kelso, Alexander.
 Kelson, W. H.
 Ker, Claude B.
 Kerr, Alexander L.
 Keyt, Frederick.
 King, David Bartly.
 King, Frederick Truby.
 Laing, C. A. Barclay.
 Laing, J. H. W.
 Law, Thomas Bryden.
 Leeper, Richard R.
 Leslie, R. Murray.
 Livesay, Arthur W. Bligh.
 Livingstone, John.
 Lloyd, R. H.
 Low, Alexander.
 McAllum, Stewart.
 Macdonald, David.
 Macdonald, G. B. Douglas.
 Macdonald, John.
 Macdonald, W. F.
 Macevoy, Henry John.
 McGregor, George.
 MacInnes, Ian Lamont.
 Mackenzie, Henry J.
 Mackenzie, John Cumming.
 Mackenzie, T. C.
 Mackenzie, William H.
 Mackenzie, William L.
 Mackie, George.
 McLean, H. J.
 Macmillan, John.
 5 Macnaughton, Geo. W. F.
 Macneice, J. G.
 Macpherson, John.
 Macvean, Donald A.
 Mallannah, Sreenagula.
 Marr, Hamilton C.
 Marsh, Ernest L.
 Marshall, R. M.
 Martin, A. A.
 Martin, A. J.
 Martin, M. E.
 Martin, Wm. Lewis.
 Masson, James.
 McDowall, Colin.
 Meikle, T. Gordon.
 Melville, Henry B.
 Middlemass, James.
 Miller, R.
 Miller, R. H.
 Mitchell, Alexander.
 Mitchell, Charles.
 Moffett, Elizabeth J.
 Moll, J. M.
 Monteith, James.
 Moore, Edward Erskine.
 1 Mortimer, John Desmond Ernest.
 Munro, M.
 Murison, Cecil C.
 Murison, T. D.
 Myers, J. W.
 Nair, Charles R.
 Nairn, Robert.
 Neil, James.
 Nixon, John Clarke.
 Nolan, Michael James.
 Norton, Everitt E.
 Oldershaw, G. F.
 Orr, David.
 Orr, James.
 Orr, J. Fraser.
 Oswald, Landel R.
 Owen, Corbet W.
 Paget, A. J. M.
 Parker, William A.
 Parry, Charles P.
 Patterson, Arthur Edward.
 Patton, Walter S.
 Paul, William Moncrief.

- Pearce, Francis H.
 Pearce, Walter.
 Penfold, William James.
 Philip, James Farquhar.
 Philip, William Marshall.
 12 Phillips, J. G. Porter.
 Pieris, William C.
 Pilkington, Frederick W.
 Pitcairn, John James.
 Porter, Charles.
 Powell, James F.
 Price, Arthur.
 Pring, Horace Reginald.
 Rainy, Harry, M.A.
 Ralph, Richard M.
 Rankine, R. A.
 Rannie, James.
 4 Raw, Nathan.
 Reid, Matthew A.
 Renton, Robert.
 Rice, P. J.
 Rigden, Alan.
 Ritchie, Thomas Morton.
 Rivers, W. H. R.
 Robertson, G. D.
 3 Robertson, G. M.
 Robson, Francis Wm. Hope.
 Rorie, George A.
 Rose, Andrew.
 Ross, Donald.
 Rowand, Andrew.
 Rudall, James Ferdinand.
 Rust, James.
 Rust, Montague.
 10 Rutherford, J. M.
 Sawyer, Jas. E. H.
 Scott, F. Riddle.
 Scott, George Brebner.
 Scott, J. Walter.
 Scott, William T.
 Seuwright, H. G.
 Sheen, Alfred W.
 Simpson, John.
 Simpson, Samuel.
 Skae, F. M. T.
 Skeen, George.
 Skeen, James H.
 Slater, William Arnison.
 Slattery, J. B.
 Smith, Percy.
 Smith, William Maule.
 Smyth, William Johnson.
 Snowball, Thomas.
 Soutar, James G.
 Sproat, J. H.
 Stanley, John Douglas.
 Staveley, William Henry Charles.
 Steel, John.
 Stephen, George.
 Stewart, William Day.
 Stoddart, John.
 9 Stoddart, William Hy. B.
 Strangman, Lucia.
 Strong, D. R. T.
 Stuart, William James.
 Symes, G. D.
 Thompson, A. D.
 Thompson, George Matthew.
 Thomson, A. M.
 Thomson, Eric.
 Thomson, George Felix.
 Thomson, James H.
 Thorpe, Arnold E.
 Trotter, Robert Samuel.
 Turner, W. A.
 Umney, W. F.
 Walker, James.
 Wallace, J. A. L.
 Wallace, W. T.
 Warde, Wilfred B.
 Waters, John.
 Waterston, Jane Elizabeth.
 Watson, George A.
 Welsh, David A.
 West, J. T.
 White, Hill Wilson.
 Whitwell, Robert R. H.
 Wickham, Gilbert Henry.
 Will, John Kennedy.
 Williams, D. J.
 Williamson, A. Maxwell.
 4 Wilson, G. R.
 Wilson, James.
 Wilson, John T.
 Wilson, Robert.
 Wood, David James.
 Wright, Alexander, W. O.
 Yeates, Thomas.
 Yeoman, John B.
 Young, D. P.
 Younger, Henry J.
 Zimmer, Carl Raymond.
- 1 To whom the Gaskell Prize (1887) was awarded.
 - 2 To whom the Gaskell Prize (1889) was awarded.
 - 3 To whom the Gaskell Prize (1890) was awarded.
 - 4 To whom the Gaskell Prize (1892) was awarded.
 - 5 To whom the Gaskell Prize (1895) was awarded.
 - 6 To whom the Gaskell Prize (1896) was awarded.
 - 7 To whom the Gaskell Prize (1897) was awarded.
 - 8 To whom the Gaskell Prize (1900) was awarded.
 - 9 To whom the Gaskell Prize (1901) was awarded.
 - 10 To whom the Gaskell Prize (1906) was awarded.
 - 11 To whom the Gaskell Prize (1909) was awarded.
 - 12 To whom the Gaskell Prize (1911) was awarded.

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Part I.—Original Articles.

The Address in Neurology and Psychiatry. Delivered
at the Ninth Session, Australasian Medical Congress,
Sydney, 1911. By W. BEATTIE SMITH, F.R.C.S.,
L.R.C.P. Edin., Melbourne.

MY first duty is to express my deep sense of the very great honour you have extended to me in asking me to preside over this Section of Neurology and Psychiatry. That duty is at the same time a real pleasure, but a pleasure that is sadly dimmed by the realisation of my own shortcomings in any attempt to deliver the address which is expected of him who speaks with the authority of the presidential office. Perhaps it will come as a blessed relief to you if I say at the outset that I do not propose to make that attempt. Indifferent health of late has prevented my giving the necessary application to the work of preparing a closely reasoned argument or making any presentation of minute or detailed observations; moreover, I realise that I am speaking in the capital of New South Wales—a State in which the organisation and equipment for dealing with the theoretical and practical handling of mental diseases has been brought to a condition of perfection second to none existing in any other community in the world. I realise that I am here in the midst of a body of workers in this special field of alienist medicine to whom it would be waste of time, if indeed it were not impertinence, to attempt to take any ground

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with which they were not perfectly familiar. Yet the time you indulgently place at my disposal may perhaps be not unprofitably spent in taking counsel together as to any measure that might possibly lead to some new outlook upon problems with which we are confronted. The public press not infrequently sets the heading "Is Insanity Increasing?" and though we answer evasively, the query must be the cause of great misgiving each time it comes up for consideration in our own minds. With all the improvements of modern years—improvements of medical education and official cures, the numbers in our hospitals are growing.

Some tables, which have been kindly prepared for me, show for New South Wales and Victoria how during a long period of years the admissions, discharges and increases have affected the proportion per population.

Since 1869 the total admissions to the Victorian hospitals have been 27,924, and in New South Wales since 1863 the number is 28,308. The proportion of admissions to the population in 1910 was, in Victoria, 1 in 1,493 or '67 per 1,000, and in New South Wales, 1 in 1,384 or '72 per 1,000. The proportion of the total insane on December 31st, 1910, in Victoria, 5,349, to the population was 1 in 246'5 or 4'07 per 1,000, and in New South Wales, 6,148 or 1 in 274 or 3'72 per 1,000.

Grant that our diagnosis is daily becoming more accurate; grant that many mental defectives of whom no official cognisance was taken in the past are daily being brought under efficient treatment, the reflection still comes home that the perfection of organisation in the recognition and treatment of insanity is not the goal towards which we are striving. It is with the beginnings of mental disorder that we hope for victory. It is with the causes of insanity that we must grapple if our work is ultimately to be crowned with the success for which all our effort is made. In common with physicians in other departments of medicine we have put on the armour of bacteriology, but it cannot be said that as yet we have got quite accustomed to the new harness, and adapted it precisely to our own special needs. Somewhere no doubt at the back of all men's minds from time immemorial the conception of "toxins" as a basis for mental disorder has vaguely been formulated, whether it be under the Biblical idea of the casting out of devils or the more

prosaic but not less efficient modern procedure of administering a smart purge to overcome the gloomy mental atmosphere born of a torpid liver or overloaded intestine. And though the first of our own special bacterial organisms, the diphtheroid bacillus of Ford-Robertson, has not as yet wholly sustained the ætiological rôle attributed to it by its distinguished discoverer, yet there is no question that in the future we shall come to some more certain knowledge in the same direction, and find that the other organisms at present known and unknown have a special vogue in bringing about those conditions which we now recognise either by actual anatomical nervous tissue changes, or by mental instability in particular directions. But when bacteriological research has laid bare the form and substance of every organism for which we seek—when every bacillus is under our microscope, there is still the problem of the “soil” in which the “seeds” of mental disorder takes root and the recognition of the conditions which predispose to such a happening.

Up to the present we have been content to group the causative factors of insanity under general headings, and even these general headings are largely filled up according to the personal bias of the particular recorder. What do these assigned causes denote? By whom are they assigned, and what value is placed upon them? They usually denote the most recent illness, worries or losses etc., under table names; they are assigned by the relatives and not by the examining medical man, and very little reliance can be placed upon them even if they should be checked and altered for the purposes of treatment. Suppose for the moment that special inquiry sheets are sent to the friends, how varied the interpretation of the answers according to the individual officer who receives them.

The Victorian hospitals issue the following circular to relatives on receipt of a patient:

“Will.....be good enough to answer the following questions relating to the patient above-named?

“Not only in the interests of the patients, but in the welfare of the whole community, it is desirable that these queries should be correctly answered; at the same time it should be understood that the communication will be regarded as a strictly confidential one.

.....

“Medical Superintendent.

"1. What history is there, if any, of insanity amongst patient's relatives, either on mother's or father's side ?

"2. What history is there, if any, of alcoholism amongst patient's relatives, either on mother's or father's side ?

"3. What history is there, if any, of phthisis (or consumption) amongst patient's relatives, either on mother's or father's side ?

"4. What history is there, if any, of nervous affections amongst patient's relatives, either on mother's or father's side."

Such causation is of no real value for diagnosis in classification. Take, for example, the report of the Inspector-General of Insane for last year, and we find a table showing the probable causes of insanity for the year's admissions, which, of course, follows the classification ordinarily adopted in all British asylums. These causes are grouped under two general headings—moral and physical. Under the first, we have mental anxiety, domestic trouble, adverse circumstances, religious excitement and the like, and under the second, various others, the one bulking most largely in the present return, save that of "unknown," being "intemperance in drink." I do not suppose anyone will question that this factor of alcoholic intemperance as a cause of insanity is one that appeals most strongly to the lay mind, and it seems that we as medical men have consciously or unconsciously been affected by a like leaning towards such a causative factor.

I select this particular heading for the purpose of my remarks because it is one upon which grave doubt has lately been thrown by a very competent neurologist, who is also a very competent general physician. At the annual meeting of the British Medical Association for 1910 Dr. F. W. Mott read a paper in the Section of Pathology entitled, "The Nervous System in Chronic Alcoholism," which doubtless you have all read, so that there is no need for me to do more than remind you of Dr. Mott's principal conclusion. He said the fact that but few cases of advanced cirrhosis of the liver are found in the asylums, and that these occur in cases either of general paralysis, alcoholic dementia or Korsakow's disease, both of which latter only occur after prolonged intemperance, suggests *à priori* that in the great majority of the cases of alcoholic insanity alcohol acts as a co-efficient to some other factor peculiar to the individual. This hypothesis is supported—

(1) By the relatively large number of cases of advanced cirrhosis of liver dying in hospital and presenting no mental symptoms.

(2) By the variability of percentages of alcohol as a cause for insanity in the different London asylums as shown by statistics extending over thirteen years.

(3) By the regional dissociation of drunkenness and insanity, as shown by a comparison of maritime and manufacturing communities with rural communities; this being explicable by the mental and physical deterioration of the agriculture population of England owing to the immigration of better types to the industrial centres.

I must be particularly careful in this direction to disclaim that anything said under this heading is to be construed into an argument for or against the use of alcohol as a beverage. Alcoholic intemperance is an admitted and deplorable social problem, but at the present moment I am not dealing with it in any light other than its relative importance as a cause of insanity, about which opinion is still divergent. Now, whether we agree with Dr. Mott's contention to the full or not, it seems that a study of his position must give us pause, and bring the reflection that the other headings under which we are accustomed to assign patients will also bear critical examination and reconsideration.

With the single exception of heredity, under which a certain amount of exactness is possible from our own investigation, all the other headings are to a large extent hypothetical—much more so than that of alcoholic excess; and if we are prepared to admit, as it seems to me we must, that our alcoholic factor has been overstated, the larger admission follows that some of the other assigned causes may likewise be weighed in the balance and found wanting.

There exists an international committee for the study and prophylaxis of mental diseases, a good outline of which was published in the *Journal of Mental Science* for July of last year. The movement was initiated by Dr. Ludwig Frank, of Zurich, in 1906, who made a formal appeal to found such a body, and this proposal was warmly upheld by psychiatrists in various countries. An international committee was formed for the purpose of co-ordinating the work, and almost every country but our own nominated representatives. Whether or not on the

score of geographical ignorance or impossibility of situation, no Australian name appears in a very long list of leaders of psychiatric medicine in other parts of the world. Dr. Percy Smith writes of a meeting in 1908: "The question of whether the committee should directly undertake investigation into the causes of insanity was raised by the French delegates, with a proposal that an international laboratory for research of an elaborate and scientific kind should be established in Paris. Such a proposal did not commend itself to the majority of members, and we (the English delegates) gave notice of a motion to the effect that the committee should, instead of undertaking direct research work themselves, take means to ascertain the kind of work bearing on their objects which is being carried on in various laboratories and institutes throughout the world, and select for encouragement material assistance and publication the researches of such workers as may appear to them most useful. The motion was unanimously adopted at the second session of the committee." Dr. Smith further very properly writes with a note of warning as to the limitations of even such a vast undertaking: "We do not mean to suggest that any measures are even likely to be successful in preventing the occurrence of insanity, for it is not one disease or due to any one set of causes. We believe that many of the forms of insanity are originally due to innate germinal variations which cannot be controlled, and which must always occur from time to time even in the most healthy human stock; but we cannot doubt that other forms, if not directly due to, are at any rate promoted by, unfavourable social environments and physical diseases, the nature of which is at present imperfectly understood."

This is a position to which we can all cordially subscribe, and it only remains to us to ask what we in Australia can do to assist in such an investigation as is here outlined. In some respects we are exceptionally favourably situated. We have abundance of material and excellent organisation already assured. We have a small community in which causes can be more clearly discovered, and we are far from many of the distressing complications of abject poverty which complicate the outlook in older countries.

The probability of aid from the inspection of school-children in getting some idea of the beginnings of mental degeneracy

and the factors of social environment, heredity, etc., is under the notice of the medical staff of the Education Department, who inform me that this inspection is diligently being pursued and material is being tabulated, to be published by themselves. Aid also should come from acute mental hospitals and receiving houses, and much might be done through the suggestive beginning in New South Wales by Dr. Kate Hogg in the study of gynæcological conditions, a matter elaborately dealt with by Mr. Tennison Collins at the Cardiff City Mental Hospital, and reported in the *Journal of Mental Science* for April of this year.

We have long wanted such from a British authority, the Continental and American records being thus confronted.

Time permits no reference to general factors, but to quote Greisinger, who wrote as far back as 1845 and 1861: "We do not consider it possible that the question whether insanity originates more frequently from physical or from somatic causes can be solved by statistics alone. Any discussion of the statistics relating to the subject from the days of Pinel to the present time may be dispensed with." The same is surely true now.

Lastly, is there any special line in which an investigation that might prove helpful could be undertaken in our own midst?

Dr. Sydney Coupland published last year a very exhaustive attempt to correlate the causes of insanity from the study of the vast collection of asylum statistics; but, as he himself says, "May I finally mention what must be apparent to all, that every such collective inquiry is imperfect by reason of the very fact that it is collective. No two recorders can be of precisely the same opinion in their estimation of evidence or the import of a fact; there are bound to be differences not only as to the value of a fact in life-history, but even to such terms as 'sudden,' 'prolonged,' 'intemperance,' 'privation,' and the like."

It has seemed to me that an investigation on somewhat different lines might be productive of result. Let a competent pathologist be attached to one of our asylums for a period with no other object than to attempt from clinical knowledge and his *post-mortem* examinations the grouping of cases sent down to him with a given causative factor. Let him ask himself in each case, not the cause of death, but whether there is any finding,

macroscopic or microscopic, which would enable him to say of such and such a case—"This belongs to the group of alcoholic intemperance," or "this to mental anxiety," or "this to bodily disease," or any of the tabulated factors. He would not assign causes at all, but look for any evidence, however minute, supporting the idea that any two or more cases sent to him with an already specified cause could be so grouped from the pathological point of view. It will probably be objected that such an inquiry would be unproductive of result and a waste of time. To such an objection I would rejoin that even a negative result would be to achieve some result, and that to achieve any result is never a waste of time. A negative result from such an inquiry, carefully conducted, would at least make us more than ever dissatisfied with our present basis of assigning factors of causation, and to be dissatisfied and more dissatisfied with any position is the first step towards its betterment. Twenty years ago such an inquiry would have been impossible, but with the improvement of staining methods and better knowledge of minute tissue changes twenty years hence it may be much easier, but it would be easier still for the pathologist of that day if some standard of comparison were ready to his hand.

It would be to deceive ourselves and deceive the public if we spoke of insanity ever being entirely prevented. It would likewise be to deceive the public and ourselves if we looked towards the multiplication and elaboration of asylum and institutional control as the highest end of psychiatric study. But the recognition of preventable and curable cases of insanity is a work which carries not merely the saving of public funds but the alleviation of a vast amount of human misery.

The cost of buildings in Victoria up to the end of 1910 is approximately £1,000,000, and the total cost of maintenance from 1869 to 1910 inclusive is £4,431,758. In New South Wales the amount spent on buildings up to the present time is £1,205,544, and the total cost of maintenance from 1879 to 1910 inclusive was £2,419,643. The apparent discrepancy in these figures is accounted for by the fact that there is ten years' difference in time, and that in the earlier years Victoria had larger numbers than New South Wales, hence the additional cost per head and total cost. Doubtless these figures are well within the mark, there being many votes from which supplies come for furniture, repairs, renewals, etc.

I cannot finish my remarks without paying tribute to the work of the Pathological Department of the New South Wales hospitals for insane, with its central and subsidiary laboratories. Mention must also be made of the fact that while in Victoria we have not had that full use of the pathologist that was intended and expected, an enthusiastic young medical officer, Dr. Lind, skilled in ward work, has been permitted to go to Europe for the purpose of studying in this direction—a notable departure. Rich opportunities for study will present themselves when the Victorian Acute Mental Hospital with its equipment is used for the purpose for which it was built.

A whole-time departmental pathologist should, however, be appointed, and adequately paid to work in conjunction with a neurological laboratory at the Melbourne University. Some such scheme is at present under consideration, and we may hope to hear some definite views on this matter during our discussions. Here I leave my suggestions.

In conclusion, these few desultory words will not have been in vain if I have brought home to the minds of those young and eager spirits gathered here, that we, who daily witness the loss of human reason and the widespread terror and suffering such a happening entails, should be upheld by the conviction that any conscientious effort to establish the causes of insanity on a more exact basis, however barren of result, will at least never merit the reproach of waste of time.

The Classification of Insanity⁽¹⁾. By JOHN TURNER, M.B., Medical Superintendent, Essex County Asylum, Brentwood.

BEFORE attempting a classification, it is desirable to define what we exactly mean by insanity. It is not an easy matter. Who is to say where the dividing line is to be drawn between the sane and the insane? The one state passes insensibly into the other, and a division, which may be valid in certain circumstances, may not be so in others.

Broadly speaking, every individual whose conduct is out of harmony with his environment is insane; the angry person incapable of listening to the voice of reason is so while his passion persists. But these transient states of insanity,

whilst they concern the psychologist, are outside the sphere of the alienist. As medical men we must extend this definition so that it includes only prolonged or persistent want of harmony with the environment, and, for all practical purposes, the definition of insanity that it is a state in which conduct is persistently out of harmony with environment meets the case. But it does not follow that everyone who conforms to this definition is a proper person to be shut up in a lunatic asylum, or compelled by law to submit to medical treatment. An individual may be the subject of chronic insane delusions, but so long as he is not a source of danger to himself or to others, nor an annoyance to the community, the law has no right to control his liberty. Therefore to define such cases of insanity as are certifiable, we must still further expand the definition, so that it now appears as follows: A certifiable lunatic is one whose conduct (owing to disease) is persistently out of harmony with his environment, and who is, or may become, a source of harm to himself or a danger or annoyance to the community.

Every student of insanity, consciously or unconsciously, evolves a classification, for no subject can be studied without one. All knowledge resolves itself into classification, for all we can know of phenomena is comprised in comparing one phenomenon with another and noting likenesses or differences.

It may be a mere catalogue, in which the cases are bracketed together by superficial likenesses, and in which the sub-divisions have only an arbitrary relationship to each other, very much as if a librarian were to classify his volumes according to their size, bindings, and whether illustrated or not. It would make no difference where he placed any of his divisions. But a classification to be anything more than a mere catalogue must have some natural basis for its justification, where each class of cases and each variety has a definite position closely related to its adjoining classes and varieties, so that their position cannot be altered without upsetting the whole scheme. The problem of a natural classification is one, therefore, of the first importance, but unfortunately it is also one of the most difficult to solve, and the reasons are not far to seek.

In the first place the human brain is an organ of wondrous complexity, and yet it functions as a unity, that is to say, that

just as each ego, each personality is not a multiplicity of incongruous and disjointed complexities or entities, so the physical basis on which the ego depends is also a coherent entity, and interference with any part, however small, of this physical basis has far-reaching influences, affecting in a greater or smaller degree the whole mechanism.

All physiological observations and experiments tend to show that each of the highest nervous centres represents every part of the organism, some parts in greater, others in less degree, some more directly, others more indirectly.

Moreover, the same interference in different persons will often produce widely different results, a condition of affairs depending in large part on differences of disposition or temperament. And differences of temperament are resolvable into structural differences. They may be defined as the peculiar reaction of different individuals to similar external stimuli.

When an efficient projection system, consisting of linked-together nerve-cells, is discharged, there is evidence that its molecular constitution is disturbed, and a more stable nervous substance is formed, which requires a stronger stimulus for its re-discharge. And the converse of this is also true, that the longer the nerve-cells have been left undischarged, the slighter is the stimulus required to discharge them.

On the psychical side there are reasons for believing that states of restlessness, cravings, feelings of restraint or actual pain are associated with, or the outcome of, efferent projection systems in a state of high tension, that is, in which energy has been accumulating, but is unable, from lack of appropriate stimuli, to get itself discharged or dispersed; on the other hand, the working of these systems, when they are able by the sufficiency of appropriate afferent stimuli to rid themselves freely of their superabundant energy, is psychically associated with a sense of freedom and well-being.

On this capacity or incapacity for the due discharge of the higher associational centres is probably to be found the physical conditions which underlie the different temperaments.

The man of sanguine temperament is one who has an abundant supply of afferent stimuli, acting freely on a not too complex system of efferent projection centres, whilst the man of melancholy disposition is one whose supply of afferent

stimuli is insufficient duly to discharge his efferent projection centres.

In a similar way pathological states of exaltation or depression may be accounted for: conditions which interfere with the due reception and distribution of afferent stimuli will lead to states of high molecular tension in the efferent systems with the psychical correlatives of pain, restraint and depression; whilst conditions which fling out of action certain of the higher efferent projection systems without diminishing the supply of afferent stimuli will allow stronger (because less dispersed) stimuli to act on the remaining efferent systems, so that the cells of these systems are freely discharged and their tension kept low, and on the psychical side there will result feelings of exhilaration, exaggerated well-being, or even maniacal states.

But apart from temperament, there are other conditions which result in similar morbid states, running different courses in different individuals. Age is one of these, and, as Tansi points out, melancholia in the adolescent probably passes into incurable dementia, in the adult issues in recovery, and in the aged remains for years stationary. We may suppose this difference to be associated with differences in the reactive and recuperative capacities of the tissues at these age-periods.

In the young, although on the one hand recuperative capacity is at its highest, on the other hand there is the greatest tendency for lesions in the less specialised tissues to spread and damage the more specialised, whilst in the aged, with general lessened vitality, the tendency for lesions to spread is very small.

The degree of hereditary predisposition is another of these factors. In other words, those brains in which the degree of structural defect is great, or in which development has proceeded up to a certain point and then become arrested when subjected to adverse stresses, react differently to brains in which the degree of defect is less, and in which development within rough limits has proceeded in its normal way.

The conduct of the child and adolescent is conduct in the process of manufacture into a more staid and unemotional type; it is puerile and immature. On the physical side it is associated with, or depends upon, immature or imperfectly organised centres of association, and when these young people

are subjected to sufficiently powerful adverse stresses, the symptoms evoked will tend to reproduce in a distorted and exaggerated form the unbalanced conduct normal to the child.

It is from this anatomical standpoint that an explanation of the bizarre conduct characteristic of the class of cases now termed dementia præcox is most readily to be found.

A further reason which adds to the difficulty of the classification of mental diseases is, as Tansi also points out, that "we are unable to estimate the psychical value of an affected cell by pathological anatomy. Unlike the cells of the liver, etc., they are not functionally equivalent, but in respect to exciting causes they exhibit the same vulnerability, whatever the psychical treasure they may contain."

This infinite diversity and complexity and inter-dependence of the nervous apparatus, the individual differences of reaction of the higher nervous centres to similar stimuli, the effects of age and heredity predisposition, and the further fact that nerve-cells are not functionally equivalent, though their vulnerability to lesions is equal, form some of the chief reasons which serve to complicate the classification of insanity.

In fact, in the present state of our knowledge, it is impossible to frame a scheme that shall have a definite niche for every class of case, and it is far more profitable to distinguish indefinite cases by periphrastic means, rather than attempt to push them into single-word pigeon-holes which they do not properly fit.

Such difficulties point to the absence of hard and fast dividing lines between the different varieties of insanity. The forms all tend to grade one into another; there are merely different forms of one insanity, and these forms represent syndromes and not neurological entities.

The scheme now proposed is constructed mainly on an anatomical basis. Its chief groups are differentiated by anatomical peculiarities, but the varieties or sub-divisions are largely symptomatological or have merely prognostic differences.

The anatomical data indicate that all the varieties of insanity, from their intrinsic aspect, depend upon quantitative rather than qualitative changes in structure. J. S. Bolton's micrometrical observations show that a definite lack of development of certain of the cortical layers is demonstrable, not alone

in the congenitally weak-minded, but also in a less degree in recent cases of insanity.

The other chief anatomical distinction is a form of immature or badly developed nerve-cell, which occurs in a large proportion of all cases of insanity.

The lunatic, as Bolton asserts, is born, not made, in the sense that it is not possible for a person to become insane in default of a certain amount of structural deficiency in the manufacture of his brain, excluding, of course, gross lesions, as injuries, tumours, or such like. It is open to anyone to produce in himself a temporary insanity by swallowing a certain amount of alcohol : every drunken man is for the time being an insane man, and the circulation of poison in the system during the course of fevers, or as the result of a sepsis, will often produce temporary derangement, even in those with the most stable and well-developed nervous system ; but in all such cases, so soon as the noxious agent is got rid of, the mental disorder disappears and the patient returns to a normal frame of mind. These cases are logically and psychologically cases of insanity, but the alienist has to deal almost entirely with cases of persistent insanity and not with these transient attacks, which will therefore find no place in this classification.

According to this classification, there are two great classes of insanity :

(1) The idiopathic or those hereditarily predisposed, embracing by far the larger number of individuals.

(2) The traumatic or accidental.

All cases of idiopathic insanity may be divided into three classes according to the degree of anatomical change or developmental defect in the cortex. But inasmuch as the difference between individual cases is merely a quantitative one, the boundaries of these classes are ill defined, and cases near the extremes of the different classes are often difficult to place.

The first class consists of the imbeciles (with or without epilepsy), in whom the structural defect is of such a degree that the nervous system is incapable, at the outset of life, of performing its functions in an efficient or normal manner.

The second class is formed of those whose structural defect is of such a degree that, although their brain is capable, up to a certain point, of performing its functions efficiently, yet it is

incapable of withstanding the physiological and inevitable stresses of life.

The third class comprises the cases of acquired insanity, that is, all those who are able to withstand the ordinary physiological stresses, but break down when exposed to the influence of adventitious unfavourable circumstances, or with advanced age. Thus the third class includes cases the result of perversions of metabolism due to pathological changes in renal, hepatic, or blood-vascular systems.

In all of these classes, with the exception perhaps of some low-grade imbeciles, besides the structural defect—the intrinsic factor—there is required also, in order to precipitate the attack of insanity, an external stress—the extrinsic factor—which is in inverse proportion, as regards its potency, to the intrinsic, so that where the one is marked or powerful, the other need only be slight or weak. This is an important point to bear in mind, for on this relation between these two great factors depends the position of the different varieties in the classification. It is indicated in the accompanying scheme diagrammatically by the plain and shaded areas.

This relative interdependence of intrinsic and extrinsic factors is a fundamental point also in the schemes of classification of Tansi and J. S. Bolton.

The large class of cases now termed “*dementia præcox*” fall into the second group; in fact, they form this group entirely.

The members of it may be described as persons living on their capital; they may, and often do, start life with the promise of great brilliancy, but all their stock, to use a business metaphor, is in the window; they lack reserve force, and, in consequence, they prematurely break down. A person with a capital of a thousand pounds can live at that rate with considerable show for a year, at the rate of five hundred pounds for two years, but the normal rate which his means allow him is very much less. In a similar manner with the subjects of *dementia præcox*, the more brilliant they may be to start with, the more rapidly they deteriorate.

Not all adolescents who break down mentally are cases of *dementia præcox*, but only those who do so mainly owing to physiological stresses. Some young persons break down owing to the potency of the stresses to which they are subjected

much earlier in life than they would have done if not so exposed. The victims of renal, cardiac or hepatic disease, of exhaustion, and, above all, of acute or subacute toxic conditions, may manifest insanity during the adolescent period, and yet not be cases of dementia præcox, and many of these cases show the substratum of peculiar symptoms, such as emotional stolidity, mannerisms and bizarre conduct usually associated with dementia præcox. This is not altogether a purely academic distinction, because, however much these last may resemble cases of dementia præcox—and very often it may be impossible to differentiate them clinically—their prospects of making a serviceable recovery are much better than they would be if they were truly cases of dementia præcox.

Because, therefore, certain cases of adolescent insanity are not cases of dementia præcox, and certain cases of dementia præcox do not develop until long after the adolescent period, it is not advisable to replace the term "dementia præcox" by that of "adolescent insanity."

Group 1 of this classification is further sub-divided, chiefly on clinical grounds at present, but, theoretically, according to the extent of the initial defect of cerebral structure, into low, medium, and high-grade imbeciles.

Under the first or low grade come those cases incapable of adjusting themselves, even to the simplest environment, and which, therefore, unless cared for by others, would perish. These form the group which in most schemes are styled "idiots."

Under the medium grade come those who are able to attend to themselves, and are, perhaps, able to do simple work under supervision.

And under the high grade those who are able to attend efficiently to their bodily needs, keep themselves clean, and are able to do their simple work intelligently and well. In certain directions their intelligence may seem to be above that of the class from which they are drawn.

But on this defective soil may be grown all, or nearly all, the varieties of insanity met with. Imbeciles of the higher grades may simulate cases of dementia præcox in all its forms, or suffer from the different forms of affective, confusional or delusional insanity, etc. They may also become general paralytics of the acquired, as well as of the congenital, type.

The second group—the precocious dementers—it is usual to subdivide into the three varieties of Kraepelin—katatonic, hebephrenic and paranoidal—of which unquestionably the katatonic is the predominant and best marked form. When dementia præcox is spoken of without a prefix it signifies this variety.

The hebephrenic group is much less satisfactory ; for one reason it is too large and embraces too many cases, and, for another, no two observers seem to be agreed as to what exactly constitutes a case of this form. With Kraepelin it denotes all those cases of dementia præcox in which a uniform, more or less profound condition of mental weakness is developed under the accompanying influences of subacute, more seldom of acute, mental disturbance. The memory for recent events soon deteriorates, and confusion of mind results. Marked dementia occurs in from five months to several years. Were this definition strictly adhered to, many cases regarded as dementia præcox, not alone by myself, but by others, would have to be excluded, in spite of the existence of many of the most characteristic symptoms, and which fit neither into the katatonic nor the paranoidal groups.

Lugaro's conception is similar to that of Kraepelin, but, according to him, in the first stage it unfolds itself with rapid and sometimes violent changes, with states of excitement and depression, with discordant and eccentric, puerile, impulsively violent, or obstinate conduct.

Stoddart recognises two sub-divisions: (1) the depressed, —some of these subsequently become exalted, and (2) cases chiefly characterised by motor restlessness, in which deterioration is more rapid than in the first group. According to him, seclusiveness, or the habit of getting away into odd nooks and corners, is one of the distinguishing features of the hebephrenic group.

In only two points do different writers seem to be in accord ; the first is the affective character of the disorder at some period or other of its course, and the second is the absence of marked katatonic symptoms ; but even on this latter point, as Tansi remarks : “ In all cases of dementia præcox, whatever the clinical variety to which they belong, absurdity of behaviour spreads a shadow of katatonia beyond the limit of the katatonic variety.” The hebephrenic variety,

indeed, at present seems very much in the nature of a rubbish heap, wherein to throw cases that do not readily conform to the other two types.

As a matter of fact a large number of cases in this group exhibit similar symptoms and run a similar course to those of the different varieties of acquired insanity, but in all there is a basis of puerile conduct.

If dementia præcox cannot be cut up into stereotyped varieties from the symptomatological aspect, the only other reasons for attempting sub-division will be from pathological or prognostic points of view, and so far the first of these is not possible; we must therefore turn our attention to the prognostic outlook.

There are certain cases in which the prognosis is more favourable than others, and especially among the hebephrenic group are a number in which a favourable prognosis may be given and which improve and make serviceable recoveries.

The third sub-division comprises the paranoid forms of dementia præcox. Kraepelin emphasises the *unsystematised* nature of the delusions and the invariable, or almost invariable presence of hallucinations, as opposed to paranoia, in which systematised delusions are an essential feature, and in which *it is extremely rare to have hallucinations*. In Tansi's opinion, also, chronic hallucinations are almost pathognomonic of this form of dementia præcox. But Bevan Lewis, on the contrary, finds hallucinations (almost invariably aural) present as an early symptom in typical systematised delusional insanity.

In my own practice I divide all delusional cases into two groups :

(a) Those without a basis of puerile and perverse conduct, the cases to which I restrict the term "chronic systematised delusional insanity," and which I place in my third group. In such cases there is a systematised delusional basis, slowly growing and passing through certain stages, which, granting the premises, are logical. The affective side is little or not at all implicated, only, that is, to such an extent as would be normal in the circumstances in which they imagine themselves to be placed. These cases, apart from their delusional sphere, are generally well behaved and more or less act in consonance with their exaggerated ideas.

(b) Those with a basis of puerile and perverse conduct, to

which I restrict the term "paranoia," and which I regard as instances of dementia præcox—the dementia præcox paranoïdes of other authors. With these cases we get a very different picture ; amongst them are to be found the pests of all asylums. The affective sphere is markedly implicated. Their delusions may be, and generally are, systematised, and of a persecutory nature. They are intensely conceited, easily offended, cunning, and able to conceal their delusions when examined and to quibble with questions in a most annoying manner. They are mischievous, and stir up their fellow-patients to rebel and to break rules. They constantly bring groundless charges of ill-treatment against the staff. The "*cacoëthes scribendi*" is enormously developed, and they cover reams of paper with writing. The format of their letters is characteristic : as a rule the writing is exceedingly neat, every inch of surface is occupied by it, and not only the paper but the envelope is covered. Sometimes two or more colours are employed to add to the effect.

Whilst hallucinations of hearing are commonly to be met with in this class they are not invariably present, or at all events not invariably discoverable by the observer.

From all that has been said it will be gathered that the sub-divisions of dementia præcox are not very satisfactory. Katatonia, indeed, forms a well-marked group, but all cases are apt to take on katatonic characteristics at some time or another in their course. In fact the longer the time that a case is under observation, the more often one meets with this liability to pass from one phase of this disorder to another ; at one time it will present marked katatonic features, at another hebephrenic, and at another paranoidal, and it may swing backwards and forwards between these three. But inasmuch as some cases make satisfactory recoveries whilst others go from bad to worse, we must endeavour to pick out signs or symptoms by which these favourable cases may be recognised.

General paralysis may occur in a case of dementia præcox, but it is not frequent, for the majority of the members of the group are too old for the juvenile and too young for the acquired form of general paralysis.

Nearly all authorities recognise that in dementia præcox there is a constitutional defect of the nervous system, but in my classification an attempt is made to apportion the degree

of defect in relation to the other varieties of insanity. From the point of view taken of the disorder, it is evident that it cannot be regarded as a nosological entity, but as closely allied on the one hand to imbecility, and on the other to certain cases of acquired insanity; nevertheless the peculiarity of the symptoms and the gravity of the prognosis in a very large number of the cases justify us in according to it a separate group. The peculiarity in the symptomatology may, it is suggested, be accounted for by the unorganised and undeveloped state of the higher associational nerve-centres in these cases. The symptoms met with are those normally occurring in naughty and wilful children, but in an exaggerated degree.

Thus although I look upon dementia præcox as only a sub-division or variety of insanity, it is a very important one, and our indebtedness to Kraepelin is great for having pointed it out, and describing in such a graphic manner its salient features.

One of the chief objections which the opponents of Kraepelin, now a rapidly decreasing minority, urged against dementia præcox was that, if there were such a disease, it was not new, that they were familiar with the symptoms, and had frequently pointed them out. Very true, but with the exception, perhaps, of Clouston, who comes in his account of adolescent insanity very near to Kraepelin, it was an instance of seeing but not perceiving. Griesinger, in 1845, described one phase of the disorder under the name of "melancholia with stupor" so clearly that it might be inscribed word for word in the latest text-book as a description of the katatonic form of dementia præcox, but he, as well as many other later observers, failed to perceive the essential identity between this phase and the various other phases of this protean disorder. The symptoms could hardly fail to be seen by any competent observer, but their significance and inter-relationship were not discovered until Kraepelin pointed them out.

Group III.—The acquired insanities.—They occur, with few exceptions, at the period of life when the physical mechanisms underlying the "ego" are fully organised, and, therefore, with these few exceptions, they fail to show the background of childish conduct which characterises the whole of the second group. In their sub-division an attempt has been made to range them in the order of the degree of their

structural defect, so that at the top, nearest to the second group, we have cases of epileptic insanity, and then the lucid insanities (psychasthenia, morbid obsessions and impulse), in which, as their name implies, there is no very marked disorder of the judgment. The victims are aware of their condition ; they may have delusive ideas which they recognise as such, and they may even take steps (often, however, ludicrously inadequate) to prevent their impulses from taking effect. It is from cases of this class that subtle dialecticians seek to prove there may be disorder of conduct without disorder of mind. But although their conduct viewed in part is logical, in part, in the sphere of the obsession, it is illogical and insane. The behaviour of such cases can readily be accounted for on the modern view of the disintegration of the "ego"—a view which covers the whole field of insane conduct, whether in dementia præcox or the acquired forms. On this assumption a portion of the "ego" becomes, as it were, detached from the rest, and this split-off complex exerts, either continuously or periodically, a dominating, but usually unconscious, influence over the remaining mutilated personality.

In this group, also, cases of general paralysis are met with, but general paralysis itself has no right to a place in a classification of idiopathic insanity any more than tumours of the brain or the various gross visceral affections, with which are associated, more or less, well-marked alterations in the mental state.

In one sense every disease is a mental disorder, inasmuch as it presents psychical modifications, but there should be a definite relation between the bodily and mental phenomena to constitute a mental disorder in the true sense of the term, certain psychical processes presupposing a certain physical basis. The known and demonstrable lesions of general paralysis are things entirely apart from the mental disorder which may be found in this condition. The accompanying mental states may take the form of manic-depressive, delusional or confusional insanity, but it is possible, although rare, for cases of general paralysis to run their course with no marked mental perversions. The lesions of general paralysis interfere with the finer physical basis underlying certain mental processes, and it is these finer physical lesions which constitute the physical basis of the mental disorder.

A tumour lodged in the brain may induce mental disorder, but no one would suggest that the tumour itself was entitled to a position in a classification of insanity.

Hysteria is closely allied to the lucid insanities ; but whether, as Babinski supposes, it is essentially an insanity of suggestion, is doubtful ; at any rate, the predominating symptom is suggestibility, which Tansi supposes comes from the disposition of the nervous centres to react anomalously under the influence of stimuli which in normal persons escape notice or are insignificant. In his view it is "less a disease than an anomaly of the nervous equilibrium ; it never leads to dementia and its manifestations are never irreparable." All its symptoms may be induced in hypnotic subjects, but to be a hypnotic subject itself suggests an inherent anomalous condition of the brain. It is a state which appears only to differ from dementia præcox in its remarkable tendency towards recovery.

It is generally assumed that the theories of hysteria advocated by the three great authorities on this disorder—Babinski, Freud and Janet—are more or less antagonistic to each other, but this is not so.

Babinski and Janet, in their hypothesis of suggestibility and restriction of the field of consciousness respectively, attempt to show what hysteria is and not how it comes about, whereas Freud's hypothesis is an explanation of the mechanism of hysterical symptoms themselves.

Babinski claims that suggestibility is the pathognomonic symptom of hysteria, Janet that it is restriction of the field of consciousness, but the first of these may very well be the outcome of the latter, so that there is no antagonism here, whilst Freud holds that hysteria is essentially a condition of disintegration of the "ego"; but if we assume with Freud that there is a splitting up of the "ego" into two or more parts, one of which functions subconsciously, this also yields a valid explanation of the existence of suggestibility and restriction of the field of consciousness. The mechanism assumed by Freud as the causal factor in hysteria is precisely similar in kind to that which he posits in the case of dementia præcox, but there is this important distinction, that the disorder in the case of hysteria is one that is rarely permanent and usually eminently curable, whereas in dementia præcox the exact reverse is the case.

The affective insanities.—Holding the opinion that the different varieties of insanity are not nosological entities, it is, perhaps, a question of no great moment whether there are or are not distinct forms of mania, melancholia and circular insanity ; certainly the larger one's outlook is over cases the less likely is one to meet with pure cases of either mania or melancholia. And if we accept Kraepelin's formula of the three cardinal symptoms of the manic and depressive attacks respectively, it becomes even more difficult to find cases which can be said to fall entirely into one only of the phases. These cardinal symptoms are as follows :

- | Manic phase. | Depressed phase. |
|-------------------------------|-------------------------|
| (1) Emotional exaltation. | Emotional depression. |
| (2) Psychomotor restlessness. | Psychomotor inhibition. |
| (3) Flight of ideas. | Retardation of thought. |

In the mixed forms of manic-depressive insanity, according to Kraepelin, any one or two of the first phase may be associated with any two or one of the second. For example, in the cases which used to be denominated agitated or excited melancholia we get along with emotional depression and retardation of thought, both constituents of the depressed phase, psychomotor restlessness, which is a constituent of the manic phase.

Tansi is in favour of there being a definite melancholic and maniacal diathesis, or of a mixed diathesis, but he is of opinion that "we are bound to conclude that in regard to these forms of mental disorder the ætiological law is made by the patients themselves and not by the disorder." But he considers that cases of true mania are so very rare that out of a thousand patients he had a difficulty in discovering ten.

Traumatic insanity.—This class does not need extended discussion ; it includes all cases of insanity arising from gross lesions of the brain (including a certain number of general paralytics).

The infantile cerebro-pathies, under which are placed the cases of idiocy, are organic diseases of the brain occurring in early life, and issuing generally in atrophy of the nervous elements and excessive proliferation of neuroglia. This reactive gliosis in the infant tends to spread, whereas in the adult the reactive gliosis excited by a lesion encloses it in a wall, thereby circumscribing its harmful effects.

Gliosis, however, is not an essential feature in all cases of idiocy; a very interesting class—amaurotic idiocy—nearly always confined to Jewish children, generally fails to show any neurogliosis, although the mesoglia is probably always affected.

The view that idiocy is a result of pre-natal, natal or post-

CLASS	Relation of the two factors to one another	AGE PERIOD	GROUP	VARIETY
IDIOPATHIC	INTRINSIC FACTOR	AT BIRTH	IMBECILITY	1. LOW GRADE 2. MEDIUM " 3. HIGH "
		CHIEFLY DURING ADOLESCENCE	DEMENTIA PRÆCOX	1. KATATONIA 2. PARANOIA 3. HEBEPHRENIA
		CHIEFLY DURING MATURITY	ACQUIRED INSANITY	1. EPILEPTIC INSANITY 2. DELUSIONAL " 3. LUCID " (obsessions, psychasthenia, etc.) 4. HYSTERIA 5. AFFECTIVE INSANITY MANIA MELANCHOLIA 6. CONFUSIONAL INSANITY EXHAUSTION ALCOHOL etc 7. INVOLUTIONAL INSANITY MANIA MELANCHOLIA DEMENTIA
ACCIDENTAL	EXTRINSIC FACTOR			1. INFANTILE CEREBROPATHIES 2. SENILE " 3. GENERAL PARALYSIS 4. TUMOURS 5. INJURIES

natal injuries is one that has not found much favour in England, perhaps because it has not received much attention here. It is a view which has much to be said in its favour, and this has been well said by Tansi, to whose writings the reader is referred for an able discussion on the question.

From this standpoint idiocy, instead of being only a more intense degree of congenital defect than imbecility, is transferred entirely from the hereditary to the traumatic class, the two conditions thus standing at opposite extremes of the classifica-

tion. In Tansi's opinion, more and more cases are being detached from the imbecile class and placed among the idiots, so that he thinks eventually the old idea entirely in favour of hereditary degeneration as the intrinsic factor in idiocy and imbecility will give way to the modern idea entirely in favour of cerebro-pathies. This is pushing the idea too far; there are two very distinct classes, the idiots, resulting from trauma, and the imbeciles, resulting from congenital defect of structure, and a study of the heredity in these cases should be one of the means—probably the chief means—of discriminating one class from the other. If idiocy is acquired, there should not be a preponderance of defective ancestry; if imbecility is a congenital defect there will be (and there is) a preponderance. Even according to Tansi himself, the idiot is devoid of true intellectual and affective anomalies, whereas the imbecile displays them in abundance.

(¹) A paper read at the Meeting of the South-Eastern Division on October 4th, 1911, at the Bucks County Asylum.

The Development of Psychiatric Science as a Branch of Public Health.(¹) By R. G. ROWS, M.D., Assistant Medical Officer and Pathologist, County Asylum, Lancaster.

ONE of the most striking developments of recent years, a development which may be seen in most countries of the civilised world, is that of the recognition of the necessity for preventive measures against disease. This necessity is not only felt in medical and scientific circles, but is, in many instances, quite as keenly appreciated by members of the general public. Few people are now indifferent to an outbreak of a serious infectious disease even in a distant land; and, in case of an outbreak in our own land, we no longer patiently watch it run its course far and wide without making strenuous efforts to check it, but by investigation we try to ascertain its cause, and by segregation and fumigation we keep it somewhat under control. The report of the spread of the "plague" in Eastern Asia at once led to an inquiry as to our preparedness to prevent its being introduced into this country, and to combat it if it gained an entrance. We have now an army of inspectors whose duty it

is to watch our food-stuffs, and the way they are handled, to investigate the conditions under which our working classes are asked to labour, to inquire into the surroundings in which the people live, and to prevent pollution of the air and water. We have a service in many parts of the country to instruct mothers how to feed and attend to their children, and the children, when they go to school, are examined to discover whether they are suffering from any disability which would hinder their making use of their opportunities, or which, if not corrected, would tend to become aggravated.

This inspection of the general health in the home, in the school, and in the factory is now a recognised part of our national equipment, and with its development there have arisen various means of help for those afflicted with common diseases and disablements. So popular has this movement become that it is discussed by everyone, it is written about in our papers and journals, and a public opinion has been developed which few would dare to oppose. This general sympathy and activity have grown with the increase of our knowledge of these diseases. Why is it then that so little attention is directed to the disablements connected with mental incapacity, congenital or acquired, and that mental diseases in their incipient stages are practically neglected?

It is true we have had commissions and reports. A few years ago a Commission was appointed to inquire into the "degeneracy of the race," and we were consoled with its report that the race showed no signs of increasing degeneracy. Later we have had a Commission on "the care and control of the feeble-minded." The facts collected by this Commission revealed a condition of things which startled us out of our state of indifference, and gave our nerves a somewhat rude shock. The report of the Commissioners contained many interesting and strongly expressed conclusions, and many important and far-reaching recommendations. The question of carrying out some of these recommendations is, we believe, now being considered, but, at the present time, we have in this country practically no facilities for helping the mentally afflicted—whether juvenile or adult—unless the mental affection is so marked as to require their segregation in a home for idiots or an asylum for the insane. Some small isolated efforts, such as an out-patient department in a general hospital, have been made, but the

results have not been very encouraging; nor can we expect any satisfactory results until this question is approached in a thorough and methodical manner and we are guided by a scientific knowledge of the subject in all its aspects.

Modern humanitarian sentiment has moved us to care satisfactorily for the bodily condition of our insane, but unfortunately we seem to rest satisfied with providing well-appointed refuges for patients suffering from mental diseases after the disease has become well established. We make no provision for the preliminary stages of mental disorder, and many of the cases have reached a chronic condition before anything is done for them. It is not at all uncommon on investigating a case admitted into an asylum to find that the first symptoms of the disease appeared six, twelve, or eighteen months before the patient received any medical advice.

As an instance of this may be mentioned a case admitted into an asylum suffering intensely from the most frightful auditory hallucinations. After the patient had been in the asylum a few days and somewhat settled down, he was asked when he first began to hear "voices"; he replied "about twelve months ago." He heard them, at the beginning, only at night and began to be troubled in the daytime just before his admission to the asylum; then his conduct became altered, and that first friend of the insane—the relieving officer—took him in hand. Here, then, was a case—and this is no isolated instance—in which the mental disease had existed for twelve months; during that time the patient had received no treatment, nor could he, under the system in vogue with us, have received treatment from anyone who had had experience in insanity. After six months in the asylum this patient escaped from a party working in the gardens and was well enough to take care of himself and keep out of the hands of those who searched for him; and, in all probability, if he had been able to consult someone capable of treating a mental case, it would not have been necessary for him to have been taken to an asylum at all.

In this country we have a system under which all the men who enter the asylum service and who alone have an opportunity of acquiring an intimate knowledge of mental diseases are forbidden to carry that knowledge into the outside world for the benefit of those suffering from these diseases; and even if a sufferer should voluntarily go to an asylum and ask for

advice, all that can be done for him is to suggest that he should consult a medical man outside, who, by the way, has had no experience in insanity, or to recommend him to call and see the relieving officer. The neglect to provide such cases with facilities for obtaining advice may have been excusable in the days when our knowledge of insanity and its causes was extremely limited, but it is quite unjustifiable in the light of modern advances regarding the ætiology and pathology of mental diseases which have been acquired by patient investigation in the Clinic and the Laboratory. We now know some of the factors which are intimately connected with the origin of mental diseases although we may not be able to explain their mechanism. We know that a third of the cases admitted into our asylums bring with them a history of alcohol or syphilis. We know that the causes which give rise to cretinism can be combated by the use of thyroid extract. We know that many cases of idiocy and imbecility are directly caused by inflammatory lesions of the brain, which are produced *in utero* or in the early years of life, and which, if they do not lead to severe conditions of mental enfeeblement, may provide a ground for mental breakdown later in life. Another great advance has been achieved by the remarkable work of Freud and Jung, which shows us the importance of psychogenic factors in the production of neurasthenic and hysterical disorders.

Other examples might be mentioned, but those referred to are sufficient to demonstrate two important facts: (1) That the causes of insanity resemble the causes of other diseases to combat which our service of Public Health has been instituted; and (2) that in order to achieve any good results in the treatment of mental disorder, the work must be undertaken by a service of men of high scientific training and keen enthusiasm.

The importance attached to psychiatric medicine in the different countries of the world may be estimated by the facilities they provide for teaching the subject and for enabling the community to benefit by the practical application of the most advanced scientific knowledge of mental diseases. In this country we have at last awakened to the necessity of giving some special instruction to the men who are about to undertake the care of the insane, but there is as yet little sign of an appreciation of the value of psychiatry as a branch of public health. The relation of psychiatry to the community was one

of the most important subjects brought before the International Congress for the Care of the Insane held in Berlin in October of last year. The subject was introduced by Professor Sommer of Giessen. He drew attention to the interesting reports presented to the Congress dealing with this subject from all points of view, including references to the organisation and management of institutions for the insane, to the boarding out of patients in families, to the organisation of the nursing staff, to the increasing number of houses for the insane and of those confined in them, to the relation of psychiatry to legislation, to the causes of mental disturbances and their connection with certain common diseases, with customs and with the development of civilisation. He showed how the development of psychiatry naturally led from simple statistics and treatment of the insane to the study in psychiatric clinics of the causes which produce insanity; how the study of heredity and endogenous diseases led on to the consideration of the relation of mental diseases to the manner of life and to the customs of the people, and how mental hygiene thus becomes intimately connected with the study of predisposition in the general population; how the development of forensic medicine demonstrates the close relations existing between psychiatry and the laws and penal justice. The important relations between psychiatry and forensic medicine have been insisted on by Professor Kraepelin also. He has pointed out the large number of crimes committed by those of unsound or imperfectly developed minds and also the close dependence of human behaviour on bodily states, on heredity, on the conditions of life and the accidents of life. Both he and Professor Sommer lay stress on the necessity for a sound knowledge of psychiatry on the part of those who have to advise on forensic cases or to give expert evidence in the courts of justice; they also suggest that some training in this subject would be an advantage to those in the courts of justice who have to adjudicate on the evidence brought forward. Professor Tamburini, of Rome, discussing the report of Professor Sommer, referred to the already instituted psychiatric and forensic-medicine schools and to the schools for scientific pedagogy and anthropology as evidence of the increasing recognition of the social element in the causation of individual and collective anomalies, and suggested that from this recognition would spring prophylactic as well as curative treatment.

Now the subject of psychiatry as a branch of public health is too large to be considered in one paper, and, as Professor Lugaro has said, it concerns not only the alienist and the general medical man but also the whole of society.

To-day we wish to draw the attention of the Medico-Psychological Association, as being the Association connected with psychiatric medicine in this country, to the important question of providing some means for dealing with the early stages of mental disorders before certification is necessary, and also for organising adequate facilities for teaching the subject and for carrying on scientific investigations.

It is admitted in most countries that the psychiatric clinic must be the centre from which development in this branch of medicine will proceed. In Germany, for instance, we find a psychiatric clinic is attached to every university in the country. These psychiatric clinics are as much a part of the university as are the medical, surgical, children's or women's clinics, and as the people are able freely to go to these last and to obtain advice from the highest authorities on the disease from which they are suffering, so it is a fundamental principle of the psychiatric clinics that patients suffering from any mental disturbance whatever may freely enter them, and at once come under the care of an expert in mental diseases.

Dr. Orr and I have recently visited the psychiatric clinics at Giessen and Munich, and we should like here to acknowledge the courtesy and kindness we received at the hands of Professor Sommer and Professor Kraepelin and their colleagues.

The functions of a psychiatric clinic are defined by Professor Kraepelin as being :

Attendance on the mentally sick.

The instruction of students.

To serve as a place to which criminals suspected of mental disease may be remanded for medical observation.

The dissemination of medical views on certain social questions and the correction of existing prejudices regarding insanity.

To serve as a connecting link between the larger, remotely situated county asylums and scientific research.

The scientific investigation of all problems connected with the study of mental diseases.

They are carried on on the lines of freely come, freely go, as

far as is consistent with the safety of the patient and the public. In neither of these clinics is any legal document necessary for the admission or discharge of patients. But where the character and severity of the mental disturbance require the longer detention of the patient in the clinic or in an asylum, such detention can be exercised only under a legal procedure which carefully safeguards the rights of the patients.

In this way it is possible to avoid the stigma which is attached to certification and seclusion in an asylum. That this is appreciated by the general public is demonstrated by the number of people who make use of the opportunities offered them. To the clinic at Giessen with its seventy beds, between three and four hundred patients were admitted in 1907. From the report of the clinic at Munich for the years 1906-7, we learn that there were 1,600 admissions in 1905 (the first complete year after it was opened), 1,832 admissions in 1906, and 1,914 admissions in 1907. At the present time admissions go on at the rate of ten or twelve per day. It should be mentioned that at Munich the clinic is open night and day for the reception of patients, so that they can be brought under the care of an expert at the earliest possible moment, and the painful impressions produced often by detention and restraint by unskilled persons and in unsuitable surroundings are reduced to a minimum. This immediate treatment at the hands of men experienced in insanity is a matter of the greatest importance from the point of view of a favourable termination of many of these cases.

Let us now consider the actual treatment of those admitted into these institutions. What most strongly impressed us in these clinics was the absence of noise and excitement amongst the patients; it was certainly an ample demonstration of the value of the means of treatment adopted. It is recognised in the first place that patients must not be crowded together; none of the wards contain more than ten beds. In the next place it is felt that patients suffering from mental disease should be kept in bed, and they remain in bed until they are advancing on the way to recovery. For the patient who is too excited to be kept in bed or who disturbs the others too much, experience has shown that prolonged warm baths provide the best means of quieting him and bringing him into such a condition as will allow of his being kept in the ward. The extent to which the

bath treatment is employed may be judged from the fact that besides the baths used for ordinary purposes of cleanliness there are in the clinic at Munich eighteen baths for prolonged treatment, five movable baths, one electric and one douche bath. The wet pack is occasionally used. The baths are so arranged that the patient can remain in the bath for days or weeks as the case demands, sleep there and take his food there. The result of this treatment is that hypnotic drugs and confinement to a single room have come to be regarded as evils to be used only on rare occasions; in fact the single rooms are occupied by convalescent and quite quiet patients and not by recent and acute cases.

Treatment on these lines will, of course, necessitate the employment of a large medical and nursing staff. At Giessen, with seventy beds and between three and four hundred admissions a year, there are five medical officers, including the Director. At Munich, with one hundred and twenty beds and three or four thousand admissions, there are fifteen medical officers to carry on the work of examination and supervision of the patients. The nursing staff must be provided in the proportion of at least one to five. This is of course a high figure, but there are two conditions to be remembered: first, the very large number of admissions dealt with, and secondly, that these clinics are established not for the housing of the insane, but for the care and cure of those suffering from incipient mental disturbances—a most important distinction and one not yet fully appreciated in this country.

Besides the patients admitted into the clinics for treatment, a large number obtain advice and help from the out-patients' department conducted by Dr. Gudden.

But the valuable functions carried out by these clinics are by no means limited to the practical work of treating those suffering from some mental disturbance. Equally important are the duties of instruction and research.

In order that the community may receive the benefit of the application of the results of the most advanced scientific research in this important and difficult branch of medicine, it is necessary not only that the medical staffs of asylums should be trained, but also that the general practitioners should know enough about the subject to be able to recognise the early manifestations of mental disease and to appreciate their signifi-

cance. They would then be able to co-operate with the clinics to the immense advantage of the patients and of themselves.

Now in Germany every student must attend a six months' course of instruction in psychiatry and pass an examination in the subject before he can obtain his diploma. The teaching is carried on in the University clinics. Having obtained his diploma, the man who wishes to take up this branch of medicine applies for a post as voluntary assistant in a clinic or asylum. Under the guidance of one of the assistants he takes histories of patients, helps in the examination of blood and urine, learns to make lumbar punctures and to collect blood for serological tests, and is also encouraged to make independent observations. In usually less than a year he is given charge of a ward or small group of wards. In the second year of his service he is eligible for an assistantship in the clinic or in an asylum. Each assistant, besides his strictly clinical work, carries on some chosen line of study. In order that he may have better facilities for learning the literature on the subject and finishing his selected work, he is given, besides his annual month's leave, two months of each year for this purpose, and during this time he remains at the clinic, but is free from clinical duties. Then there is a monthly "Referatabend," that is, one night per month is set apart for the discussion of the work done and for its consideration before publication. At these meetings reports on current literature also are made, important forensic cases are discussed, and expert evidence is reviewed.

Further, numerous short courses of instruction in special subjects are provided, courses in sero- and cyto-diagnosis in the insane, the technique of the Wassermann reaction, of biochemical and other special methods of examination.

Of very special importance in the clinic is another course which has been arranged for qualified men. This was attended in 1906 by thirty-eight men, and in 1907 by sixty men, of whom one third were foreigners. In this course were included demonstrations on clinical and forensic cases, criminal psychology, methods of examination, and the anatomy, normal and morbid, of the central nervous system.

The last and perhaps the most important section of the clinics with which we shall deal is that which provides facilities

for scientific research. We recognise the action and interaction between psychiatry and the many associated sciences, but we have now to consider the psychic and physical conditions connected with mental disturbances. Advance in this direction will be slow, and will, in fact, be rendered possible only by patient, thorough, scientific investigation. Here also we were much impressed by the facilities provided for research in the two clinics we have just visited. Rooms well furnished with apparatus are provided for the clinical examination of the patient, for the deeper investigation of mental life in the form of experimental psychology and psycho-analysis, and for the finer clinical examination of the blood and other fluids of the body, especially the cerebro-spinal fluid. The vast importance of anatomical investigations is also recognised, and at Munich room is provided for thirteen investigators to carry on a mass of work which it is hoped will help to solve some of the mysteries connected with the normal and morbid action of the central nervous system.

We have dealt at some length with the clinical and scientific departments of the psychiatric clinics as they are developed in Germany in order to draw attention to what experience has proved to be of practical value in the treatment of mental disorders, to demonstrate that although the difficulties of the subject are so evident there is no reason to be dismayed at the increasing complexity of the scientific problems, and to show that a man need not be considered, nor need he consider himself, beyond all hope because he may be disturbed by a hallucination, a little confusion, or a wrong judgment. Experience, guided by knowledge and combined with enthusiasm, has proved that something can be done for many of these cases if they are taken in time, and the results of scientific endeavours show year by year that there is less and less justification for the indifference of the authorities entrusted with the care of the insane who stand helplessly and hopelessly before this problem, apparently convinced that little or nothing can be done.

Combined with this inactivity we often find an academic discursiveness, an arm-chair sentimentalism, on the part of some who have not done much to advance our knowledge of the biological basis of insanity, and of others who have never had anything to do with psychiatry but who offer wild suggestions—still from the arm-chair—as to interfering with the

liberty of the subject and as to the sterilisation of those who have committed the unpardonable sin of becoming insane in a society which has done so little to help them to avoid such a catastrophe. It is certainly easier to write popular articles on subjects like "heredity" or "degeneracy," than it is to discover by patient work the laws of the one or the causes of the other.

Surely before such extreme measures are adopted, or even suggested, it is our duty to make some effort to discover the pathogenesis of mental diseases by scientific investigation, and to educate the people that they also will have to take a part in solving this important problem.

Then we shall no doubt be met with the objection that the provision of such institutions will involve the expenditure of such an immense sum of money. I believe we spend in Great Britain about £3,000,000 a year on those suffering from various forms of mental affliction. That, certainly, is an immense sum to spend while getting so little in return. A large proportion of this money is spent in housing, feeding, clothing and taking care of the 97,000 inmates of the county and borough asylums of England and Wales. We learn from the Commissioners' Report, published in 1910, that 20,000 patients were admitted into these asylums during the previous year, and of these over 30 *per cent.* were discharged after a longer or shorter detention. Now it may safely be said that very few of these 20,000 fresh admissions did obtain, or could have obtained, any advice for their mental illness at the hands of anyone who had had experience of mental disorders before they reached the stage when certification and seclusion in an asylum became necessary. When we visited Giessen we were informed by Professor Sommer that in the province of Hesse, by reason of suitable treatment during the early stages of mental illness, they had been enabled to postpone for some years the erection of a new asylum in the province. Is it not, therefore, fair to assume that, if facilities were provided whereby expert advice and treatment in a well organised psychiatric clinic could be obtained by those threatened with a mental breakdown, we should save enough of the £3,000,000 to justify the expenditure involved in the establishment of such clinics? Further benefits would be derived from them in that we should be able to avoid the breaking up of the home, which now in so many instances

follows the removal of the bread-winner of the family to an asylum and his long detention there. And as the patient would enter the clinics freely and without certification, we should get rid of much of the stigma which still attaches itself to those afflicted with mental disorders, a cruel relic of the time when such a breakdown was considered to be a punishment inflicted by an outraged Deity for past transgressions.

From purely commercial considerations, therefore, this project of providing psychiatric clinics should recommend itself to the authorities, and, if we convince the community that, by means of these clinics something can be done to prevent an attack of insanity, or to shorten it when it does occur, there will be no difficulty about the money. Our country is soon to be dotted over with sanatoria for consumptives. Now we need not discuss the advisability of such a movement; the point for us to recognise is that when once the community is convinced that phthisis is, to a certain degree, a preventable and curable disease, there is practically no objection to the expenditure of the money. So it will be with regard to psychiatry if it is shown that the problem is not insoluble.

But it is altogether unworthy of this subject that it should be considered so much from the commercial side. Too often the successful administration of our asylums is measured by the maintenance rate, and no question is asked regarding the encouragement or neglect of scientific work in these institutions. Too little practical interest is evinced in the important questions which form the crux of the whole matter: What is the biological basis of insanity? What is the mechanism of the action of the causes which give rise to insanity? Can anything be done by scientific investigation to check this scourge? What means must be adopted to attain this end? Without doubt the most important of these means will be the dissemination of the knowledge of the subject already obtained and patient devotion to further research. The response of some of the universities to the proposals of the Medico-Psychological Association was a step in the right direction, but it is a question whether this subject can be satisfactorily taught when the university does not contain within itself the material with which to teach or men to teach it who are devoting all their energies to psychiatric science. We would submit that the establishment of institutions somewhat on the lines of psychia-

tric clinics as they have been developed in several of the countries of Europe would provide valuable centres in which knowledge could be acquired and from which it could be disseminated. The advantage to the student of working in the atmosphere of a clinic where he may see the treatment of mental disorders according to the most advanced knowledge on the subject, where he may be instructed by men who have done and continue to do their share in investigating the still obscure questions connected with this difficult science, where he may be encouraged to make some investigation on his own account with some one at hand to direct and advise him, and where facilities for attending courses of instruction in special branches of the subject are provided, will be obvious to all. There is no doubt that the interest of the men who decide to undertake the subject of psychiatry will depend largely on the way in which the subject is taught to them, and also on its being demonstrated to them that, although progress will be slow, a whole-hearted zeal in the scientific examination of patients and in the investigation of the causes of mental disorders will eventually allow of something being done in the way of prevention.

This is a big task, no doubt, but equally there is no doubt that the task can be accomplished if, having recognised the unsatisfactory conditions under which psychiatry exists at present in this country, we make an honest effort to develop this science in all its branches and to provide a service of men qualified to assume the position of experts and enthusiastic to do their share of work.

Although this task will require the co-operation of all who feel an interest in sociological questions, it is an undertaking to be initiated and directed by those connected with psychiatric medicine. There can be no doubt that the principles contained in these papers will be readily admitted by all the members of this Association. It remains now to put these principles into action so that the reproach of such a glaring neglect of this subject from the points of view of the patient, of the students, of the assistant medical officers of our asylums, of the community and of science may be wiped out. That these principles are not new is demonstrated by the reports of two asylums which we have read since the papers were written. These reports are so intensely interesting that we feel we cannot do better than close with an extract from each of them.

The first extract is taken from the fourth report of the visiting committee of Hanwell Asylum. The Committee say :

"In the constitution of the Hanwell Asylum we are also struck with the paucity of medical officers attached to it. There appear in round numbers to be about 500 patients on the male and 500 on the female side, yet there is only one resident medical officer attached to each department and one visiting physician for the whole establishment. The inefficiency of so small a medical staff is obvious. If we look across the Channel we find in Paris that the Salpêtrière, with its thousand patients, has four times the number of visiting physicians and ten times the number of resident medical officers. The disproportion between the sane and the insane is here so great that it is impossible under such a system to bring any moral influence to bear upon the afflicted multitude. Then, again, this asylum costs the county £26,500 per annum (as appears by the present report), and yet does nothing of any importance for the benefit of this department of science.

"Such an asylum as Hanwell ought to do something more for the benefit of science. There ought to be a more numerous medical staff and a permanent clinic attached to such an institution. We have statistical tables before us giving the number of patients admitted and discharged, cured, relieved and dead, but where are its pathological reports? Since the opening of the asylum 1,261 patients have died, yet the *post-mortem* examinations, when such have taken place, have been made privately, neither student nor professor being benefited by witnessing the result. The County Asylum of Hanwell, supported largely as it is by county rates and parish assessments, is as much a hospital as St. George's or St. Bartholomew's, and ought to have a medical staff as numerous and efficient as those of any other metropolitan hospitals. While charity might thus be administered upon the highest principles of Christian benevolence, something ought to be done to advance our knowledge of science and thereby enable us to relieve the afflictions of suffering humanity."

This Report was published in the *Journal of Psychological Medicine and Mental Pathology* in 1849.

The second extract is taken from the eighth report of the medical officers of the County Lunatic Asylum at Forston, Dorsetshire. It runs thus :

"The past year evinces that there is still much procrastination in conveying the insane poor to an asylum, in consequence of which it is much to be feared the disease is aggravated and often proves fatal. Thus wives and children are too frequently deprived of their natural protectors, and in not a few instances become a heavy burden on the rates.

"The inference to be drawn from the statistics of insanity is that a large proportion of those individuals who are withheld from the asylum during the early period of the disease become the subjects of chronic insanity. The expense incurred in maintaining the destitute insane at the commencement of the malady would ultimately prove a measure of pure economy. In many instances the expenses of a few months only would fall on the parishes instead of their becoming, as is too often the case, paupers for life, and with the miseries of the unfortunate patients greatly aggravated. There is much reason to fear that unless measures are adopted more efficient than those at present resorted to, great neglect will continue to exist. A well-devised system of transmission with early treatment might probably have arrested the ravages of the disease."

This was published in the same journal in 1850.

(¹) A paper read at a Special Meeting of the Medico-Psychological Association held in London on November 20th, 1911.

Some Points Complementary to the Institution of Post-Graduate Instruction in Psychiatry.(¹) By DAVID ORR, M.D., Senior Medical Officer, County Asylum, Prestwich.

It is now generally granted that a post-graduate training for medical men desirous of taking up lunacy as a speciality is essential in order that the study of the causation of insanity may progress along scientific lines, and accurate co-ordinated observations result therefrom, but it is equally necessary that the conditions and circumstances of these men on taking up work in asylums should conduce to the best interests of the speciality in question and tend to bring out the best qualities of the medical personnel. A moment's consideration proves that such conditions are conspicuous by their absence.

Assistant medical officers have no legal position, they are

condemned to celibacy until superintendents, or in some instances deputy-superintendents, thus resembling house-surgeons in general hospitals but with the irksome addition of years of waiting. They have no real career in the sense that can be applied to an assistant physician or surgeon at a general hospital, and if, at the outset, they are stimulated by the desire for scientific research, the incubus of routine work soon tends to stifle it. Many assistant medical officers have to look after five hundred patients, five hundred abnormal minds, each one of whose perverted mentalisation would afford interesting study to the acutest intellect for a considerable period of time. This task for a raw youth is manifestly absurd.

There are two ways in which the position of assistant medical officers in asylums may be regarded. Their position is either that of a medical man to look after the general health, comfort, and welfare of a certain number of insane persons, or it is that of a trained specialist able and willing to devote his life to the amelioration or cure of the mentally afflicted by bringing to bear modern research and knowledge on his subject. If there be any who imagine that duty towards the insane ends on completing the routine prescribed by the rules at present in force, a duty confined to daily rounds, physical examination, observance of general hygiene, and an elementary mental examination, then we have no hesitation in telling them that such an attitude is unworthy of a decade in which all other branches of medicine are making sufficient headway to justify past effort and hold out prospects of far-reaching results in the future. We hold that with the time at his disposal the assistant medical officer should be encouraged in every possible way to approach his subject in a more highly scientific spirit than that which at present is demanded in the service, and thus help to bring his speciality into line with the other special branches of medicine which in modern times converge towards the prevention of disease.

All this may seem to be an indictment of assistant medical officers in general, an adverse or even biased criticism, but we would hasten to correct any such impression. This is a criticism of a system which, though in recent years it has greatly improved in its organisation, discipline, administration and guidance on lines suggested by humanitarian thought and modern science, yet even now has limitations which paralyse

the true work of psychiatry. Attention has been almost exclusively confined to administrative work ; consequently the claims of science have received scanty consideration, both without and within the asylum. So no reasonable person would dream of attaching blame for lack of scientific tendencies, effort, or attainments, to assistant medical officers.

It was with a view to stimulating research in asylums that a sub-committee of the Educational Committee of the Medico-Psychological Association drew up a curriculum for a post-graduate diploma in psychiatry which was submitted to universities along with the request that they might institute a course of study. Four of them supported this Association and in three the course is in actual existence. So far, therefore, something has been accomplished and facilities for training are provided. But there is an important aspect of the question which must be considered before any further step can be taken, and that is the attitude of the assistant medical officers towards the new movement.

There are always two interests in any bargain, so let us consider how an assistant medical officer would receive the suggestion that he should be specially qualified in psychological medicine with an expenditure of his own time and money. We readily admit that incitement to work and free scope for the development of ambition are the best stimulus for getting good results from the average man. At the same time there are considerations affecting his social and domestic life to which he cannot be entirely oblivious but which are neglected under present asylum conditions. So our young man in question would in all probability, and rightly too, turn and say, "I'm to spend this time and money, I'm to use my special knowledge to conduct research in insanity, I'm, in fact, to be a specialist ; meanwhile, in exchange for this I'm shut up in an asylum, treated like a house-surgeon, have no legal status, can't be married after a reasonable period of probation, must live like a monk. Keep your qualification ; I'm a mere man, and claim to live a natural human life."

Now, can exception be taken to this attitude? Surely not. It is quite reasonable ; and it is only by looking facts in the face, by admitting the alienated and anomalous social position of assistant medical officers in the asylum service, and by speedily rectifying the faulty, even pernicious system which

condemns them to something worse than a monastic life, that any headway ever will be made towards putting what we are pleased to call our speciality on a rational basis. Were the whole position of medical officers remodelled so that it might be relieved from the depressing influences of present asylum duties and permitted the members of the medical staff after a period of probation to have the option of leaving the quarters provided in the asylum and of occupying a house, then the greatest difficulty in the path of further progress would be removed. Such a radical change of system would be beneficial to both the asylum and the officials, and once established the governing authorities could expect, and if necessary demand, co-ordinated scientific work from the medical staff; and in doing so they would only be performing a duty in the public interest of the present and future. Special post-graduate education and extension of privileges to assistant medical officers must, therefore, go hand in hand; the former without the latter will be a conspicuous failure.

Is there any necessity for so many medical men to live in the asylum building every night? In large asylums there is a staff of six assistants, in smaller ones two or three; the number varies of course; but there they are waiting for promotion, dining together every night, killing the evening in a routine fashion, which in a few years becomes appallingly monotonous. There is no work beyond a night round, they are rarely called up for an emergency, and yet they all live in. Should any casualty take place at night it is almost invariably slight; as a rule one is called to administer a hypnotic. The point need not be laboured; it is obvious to those who have spent any time in the service, and so it may be assumed that a relaxation of the present rigid arrangement would entail no neglect of the patient. This is not the place to go into details as to how a living-out system for medical officers could be arranged, but surely in our largest asylums the superintendent with two assistants, and in the smaller with one, would be ample to cope with the slender amount of night duty. Those who regard this suggestion as too bold and unworkable might contrast our present enlightened system of treatment in lunacy with the times of straight-waistcoats and chains. Under some such modification as indicated above medical officers could look forward to leaving the "shop" behind them on completion of

duty—a very important point in asylum work and one thoroughly appreciated by the lay mind. We are of opinion that this matter has only to be put before asylum committees in an unbiassed manner to receive full consideration and support.

Up to the present we have dealt with only one of the points germane to reform. There is another of special importance—that of the legal position of an assistant medical officer. When a young graduate takes up asylum work he finds himself in a service hedged round by a strict Act of Parliament, but to his surprise he discovers that in that Act there is no mention of the assistant medical officer. The Act of 1890 speaks only of the “medical officer or superintendent,” and the “medical officer” is defined as “superintendent,” or, if the superintendent is not a medical man, the “resident medical officer of the asylum”; there is no reference to any medical officer except the “medical officer or superintendent.” Neither in that Act nor in any subsequent Lunacy Act is the assistant medical officer mentioned. On further inquiry, however, he discovers that he is mentioned in the Commissioners’ rules as follows: “The entries in the medical journal, case-books, and *post-mortem* book to be kept in every institution for lunatics shall be made by the medical officer thereof or by an assistant medical officer under his supervision and control, and every such entry shall be signed or initialled by the person making the same.” His position as a clerk to make entries “under supervision and control” defines the value set upon his services towards the insane with an exactness which could only be the product of a legal outlook. Irrespective of years of service his position remains unaltered and unalterable until such time as he becomes senior medical officer and automatically acquires the right to act as deputy-superintendent. It is true he is not called on to do more than the legal minimum; he need never have read any books on his speciality; he need have made no study of psychology or of psychiatric medicine beyond an empirical observation or two in his daily round. He need never have shown the slightest interest in scientific knowledge. All this ought to, and does, impress him with the fact that he is a mere cypher appointed in obedience to a legal mandate, and very little experience shows him that his position is wholly undignified and one in which he can take no pride. He certainly has no reason to grumble at the initial salary. For

a newly qualified man to start with a salary of £150 per annum and all found, and that salary to increase by a substantial sum annually, must be considered satisfactory. But even in those circumstances we constantly hear of the difficulty of obtaining suitable assistant medical officers.

Now one point that must be remembered is that in this country the asylums have so increased in size, and the administrative duties have become so heavy, that it is impossible for the superintendent to give much attention to clinical work. This is handed over almost entirely to the assistant medical officer, and he finds himself responsible for four or five hundred patients ; only the more important cases and incidents in his section receive any attention from the superintendent. It must be, or at any rate should be, extremely galling to an assistant to feel that although he has this responsibility he is not, after all, a legally recognised officer of the medical staff of the asylum. It is true that at one time during the organisation of asylums assistants were appointed for the sole purpose of attending to the immediate wants of their patients, but regard the different position of lunacy at the present day.

It will be at once admitted that the science of psychiatric medicine has made vast strides, as strides in science go, during the last twenty years. Twenty years ago the knowledge of the subject was rudimentary. Metaphysical psychology was not yet seriously attacked ; the anatomy and physiology of the nervous system were not considered of fundamental importance as a basis for the study of mental disease ; the reaction of the nervous system on the organs of the body, and of the organs of the body on the nervous system were unknown or only hinted at ; the analysis of the mind from a therapeutic point of view was not employed ; investigations into the structure of the nerve units, of the lesions which occur in them, and of the mechanism by which these lesions are produced were scarcely begun. The methods in use at that time were unequal to the task, but since 1890, thanks to Golgi, Nissl, Cajal, and Bielschowsky, investigators have been in a better position to cope with the many difficulties, and to face them. Much has been done by these methods, and new methods for investigating even more difficult problems are being discovered year by year. By those means new fields are being opened up, so that it is

obvious that a high grade of scientific training is necessary before a man can undertake work of this nature.

But what has the lunacy service to offer one who knows that his duty does not end with merely seeing his patients clothed, fed, and kept clean ; who has recognised that there is a scientific side to psychiatric medicine, of intense interest and of supreme importance, and who has striven to keep abreast of the work done by others, and to add some contribution himself? In several countries on the Continent it is admitted that if a man has reached the age of twenty-seven to thirty years, if he has qualified himself to carry on research, and if he has shown by his efforts that he is intent on continuing in his serious endeavour to add to our knowledge of psychiatric medicine, he is justified in claiming that he shall be recognised as a permanent legally appointed officer of the asylum in which he is working.

In Italy, in 1899, the government assured to the director full authority over all the branches of the asylum—clinical, disciplinary, and economic. But in 1909, owing to the efforts of the assistant medical officers who formed an association, and of some of the superintendents who recognised that the work of the assistant medical officer was satisfactory in proportion to his sense of responsibility, while a long dependence was deleterious, the Government of Italy decided to recognise officially the assistant medical officer's responsibility for his own section, *i.e.*, he was given a sphere of personal action. Giannelli states that in France, Germany, Switzerland, Norway, Denmark, and in some asylums in Russia, the assistant medical officer is autonomous in his own section. Sciuti, after years of the application of this principle in the asylum at Naples, expresses his strong approval of it. In England, a man who continues to work while in the lunacy service may gain very little by it. After ten years or more he may find himself in the same position, with the same salary, and with the same prospects for the future as though he had simply fulfilled the letter of the law. After his years of experience he may be still in an intolerably dependent position—certainly the worst incentive to work that can possibly be imagined, and one which gradually kills interest, enthusiasm, and therefore progress.

If we compare the lunacy service with other medical ser-

vices—Public Health, the Royal Army Medical Corps, or the Colonial Medical Service—we find that they are now attracting men in large numbers, and for the simple reason that each member is trained for special duty and freely given the responsibility which is inseparable from his work. It is only by doing so that the true qualities of the man are brought out or his deficiencies discovered—a very important point in the efficient organisation of any service which is the concern of a community. And this raises a point not sufficiently recognised by those who govern the arrangements for the segregation of the insane. Has it ever occurred to those governing bodies that the lunacy service is not, but should be, one of the most important departments of State medicine? Does it require any argument to demonstrate beyond dispute that the mental health of a community is quite as important as the physical? Not a stone is left unturned to stamp out a few cases of small-pox, although we are all carefully vaccinated, and the country is staffed with highly trained medical officers of health, but with true British inconsistency the crying need for a thorough organisation of lunacy affairs is, year after year, allowed to pass unheeded. And why? Because the medical staff of our asylums have not that position as a body which gives authority to statement of facts and to the suggestions which must emanate during the evolution of a special department of science. Were it recognised that those who come into the asylum service should be trained and efficient, that responsibility should be extended to assistant medical officers who, after a period of probation, have qualified themselves to merit the name of specialist, then from that moment lunacy affairs would be established on a basis which would give those who think some hope for the future. To ignore the young members of a service is not the way to produce efficient men who will occupy positions of responsibility in the time to come; and the mere fact that assistant medical officers have no legal position, are ignored, are legally irresponsible, and untrained, must appeal to everyone as an anomaly which should receive immediate attention. It is this state of affairs which is holding back progress in the treatment of insanity, and making it, as a science, ineffective. Those who look across the channel and see the work, the enthusiasm, and the formation of clinics in psychiatry, envy the broad-mindedness of our Continental

neighbours, and feel that Britain, the leader in humanitarian methods, is out of the race where science is concerned.

To sum up, then, there are three evils in our asylum service at the present time which demand immediate reform, unless we are content to sit in the background while other services are taking their legitimate place in the scientific world.

(1) Those who have decided to adopt the lunacy service as a speciality must be properly trained. Post-graduate courses have been considered and provided.

(2) After a period of probation, say three years, asylum committees should consider an application to live away from quarters, either in a house on the estate, or in close proximity to the institution.

(3) Every permanent assistant medical officer must have legal recognition.

These three recommendations would seem to be the basis from which progress will spring, and co-ordinated investigation develop. The question of the causation of insanity is too huge a subject for single-handed effort, and to expect any results of real permanent value under the present system is a ridiculous under-estimation of the intricacy of physiological and pathological processes. Nature does not yield up her secrets to the tyro, and those who await the advent of a genius too often forget that it is the patient work of his predecessors which enables him to put on the coping-stone, and claim the credit of a brilliant discovery. And so at the present time when it may be truthfully stated that we know practically nothing of the causation of insanity, it is our duty to organise investigation and subject it to the criticism of trained minds in order that the discovery of well-grounded facts will be the outcome.

When all the permanent medical officers of our asylums are true specialists, the speciality will have a power of the utmost use to humanity, and the lay and medical papers will cease to advertise the narrow opinions and babblings issued by those who know too little of the whole subject to speak with any authority.

(1) A paper read at a Special Meeting of the Medico-Psychological Association held in London on November 20th, 1911.

Sterilisation from the Eugenic Standpoint, with Heredity Statistics from the Long-Grove Asylum Clinical Records. By GEOFFREY CLARKE, M.D., Senior Assistant Medical Officer, Banstead Asylum.

THE study of eugenics is attracting an increasing amount of attention and interest from scientific men, legislators, and society in general.

The field of psychiatry and mental degeneracy is undoubtedly one of the most important from a eugenic point of view ; several papers have recently appeared in the *Journal of Mental Science* bearing directly upon this question.

Lay members of asylum committees and people interested in social reform and Poor Law work are almost feverishly anxious for drastic measures to be adopted to prevent the multiplication of the unfit. Their position is somewhat as follows. Official records clearly prove that insanity is increasing by leaps and bounds and out of all proportion to the increase of the population. It is practically universally admitted, and there is overwhelming evidence to show that defective heredity is the most potent cause of insanity. Improvement in medical science and improved sanitary surroundings have proved more of a curse than a blessing from a eugenic standpoint ; by keeping alive the weaklings and by patching up both the physically and mentally defective, you favour the propagation of the unfit and tend to weaken the rule of nature which constantly strives for the survival of the fittest.

It is pointed out that breeders of stock and domestic animals do not allow the matings to go on indiscriminately, but carefully select parents with a view to the quality of the offspring desired, and that the unfit, the deformed and the diseased are not allowed to multiply.

In the light of these facts it is asked. Is it not our duty to do something for the improvement of the human race by preventing the insane, the feeble-minded and the mentally unstable from breeding ? The medical profession are urged to bring forth some scheme for the sterilisation of the mentally unfit which will stem the ever-increasing procession to our asylums and prisons.

If we reply that we are not yet in a position to recommend measures sufficiently drastic to be of any practical use from a eugenic point of view, we are taunted with not being up-to-date or progressive ; it is almost hinted that we are in league with the devil, whose evil machinations on the minds of men were not destroyed when he disappeared into the sea with the Gadarene swine.

Let us shortly review these points. In the first place there is no doubt about the increase of insanity. This can be seen at once by glancing at the Commissioners' Blue Book. Here you get a table showing the number of "reported" lunatics, idiots, and persons of unsound mind for a period of fifty years. In 1859 there were 36,762 known cases of insanity, or one to 536 of the total population. In 1909 there were 128,787 reported cases, or one to 278 of the whole population ; so that roughly speaking, there are three and a half times as many cases as there were fifty years ago, and during the same period the proportion of the insane to the general population has doubled.

The figures at first sight appear alarming, but it must be borne in mind that they only refer to "reported" cases ; they give no guide at all to the numbers of cases which we should regard as insane if we could apply our present tests and standards to the population of fifty years ago.

The harmless lunatic, and the village idiot whose quaint sayings and antics relieved the dreary monotony of country life a few years ago, are now lodged in suitable institutions and have become "reported" cases.

One of the natural results of the advances of civilisation is the increase of insanity. The more complicated life is made, the more regulations and conventions there are to be observed, the greater will be the number who fail to adapt themselves to the increasing complexity of their environment. Insanity is not a definite disease, but a variation from the average mental state ; there is no definite line between sanity and insanity, and even the shadowy line that exists is drawn at a different level according to different social surroundings. It varies in different countries, and is even different for urban and rural districts in the same country. Many mild mental cases can live a useful life on a quiet country farm but cannot tolerate the fierce life of a London slum. Society demands an increas-

ingly severe standard of sanity, and there is no evidence to show that lunacy is increasing out of proportion to those demands.

With regard to the improvement of medical and hygienic science favouring the survival and multiplication of the unfit and tending towards national deterioration ; this is a widely held opinion, and is constantly pointed out both in scientific and popular writings. It is a general statement which it is impossible to prove and equally impossible to refute. No doubt a greater proportion of weaklings are kept alive and reach the reproductive age, but every family physician knows of numerous cases where weakly infants and delicate children, whose early years are a constant source of anxiety, and who only survive on account of much care and attention, grow into strong, healthy adults.

Improved conditions have stamped out many epidemic diseases which attacked both strong and weak, and although doubtless the weak were more likely to perish, it is probable that many of the strong who survived were permanently damaged. Advances in medical science and the more enlightened treatment of disease have no doubt improved the general adult stock of the country, but it is accused of also keeping alive stock which, from a eugenic standpoint, ought to have perished.

The point is, has the advance in science tended to benefit or to impair the mental and physical qualities of the race? Are we as well off, from a breeder's point of view, as we were in the dark ages? Have we a larger or smaller proportion of mental and physical degenerates than the semi-civilised eastern nations, where the art of medicine means mysticism and where sanitation is unknown?

In one respect at any rate better surroundings and treatment have helped to increase the proportion of insane—the average life of those in institutions has been prolonged by their healthier surroundings even during very recent years, and this has caused an increased accumulation of chronic patients.

The arguments based upon the experience and methods of stock-breeders cannot fairly be applied to human beings. Breeders of pedigree animals, biologists, and experimenters on Mendelian and other lines are gradually collecting facts and formulating laws of inheritance ; they teach us of normal and abnormal

variations, they separate the hereditary characters from those due to nurture and environment, their work is invaluable to the student of eugenics, but they help us but little with the problem of insanity ; they shed no light on the transmission of mental qualities, and are concerned purely with the physical. The pedigree heifer is probably a dement, the foxhound is a cheerful imbecile, the fleetest racehorse is often an irritable, dangerous rogue. Zoologists and breeders have some great advantages in the study of heredity. They can choose the parents, they can alter the nourishment, and exactly determine the environments ; a single observer can watch and record in detail many generations of animals, but it is very seldom that an accurate record can be obtained of even three generations of human beings.

It should also be observed that breeders of special strains of animals and of pedigree stock do not propagate from the average animal, but only from the best, only from those who possess in the most marked degree those qualities which they consider desirable to transmit.

The question which is now being much discussed is this. Do we know sufficient about the transmission of mental disease to advise the State to say to certain people who are at present free citizens, "thou shalt not breed"? Is there reasonable evidence that we can materially decrease the normal increase in insanity without injustice to the individual?

Dr. Stansfield read a paper at Bexley last year dealing with heredity and insanity, which was published in the January number of this Journal.

He discussed the various causes for the increase of insanity, giving examples and quoting statistics emphasising the importance of heredity at a factor. At the end of the paper he puts this question and its answer. "How are we as a nation to overcome the evil and stem the flow of this rising tide?" To my mind there is but one remedy, and that is "sterilisation."

So Dr. Stansfield at all events has nailed his colours to the mast. He lays some emphasis on the disproportionate increase of pauper lunacy compared with that of private patients during the last thirty years, and attributes this to a growing recognition of the importance of heredity on the part of the better-educated portion of the community and an ignorance of the fact by the class which supplies the pauper

patients. He hints that it is possible that the well-educated with hereditary mental taint purposely refrain from breeding from the sense of eugenic duty.

There is, however, I suggest, another possible explanation for this disproportion. It is probable that thirty years ago much the same proportion of the wealthier classes were under certificate and in the care of friends as there are to-day, but it is quite certain that a far greater proportion of the poor have been put under certificate during recent years. Again, apart altogether from insanity, have the wealthy as a class increased in anything like numerical proportion to the poor?

Dr. Stansfield's paper was supplemented by one from Dr. Faulks on the sterilisation of the insane. He dealt with the surgical aspect of sterilisation, quoted the experience of American and Swiss observers both in respect to sterilisation and castration, and classified the several proposals that had been made as to suitable cases for surgical interference. The most stringent of these proposals, as far as we are concerned, is the compulsory sterilisation of all insane, imbecile or feeble-minded people prior to their discharge from an institution, and irrespective of whether they are regarded as recovered or not recovered. Dr. Faulks considers the proposal to be too drastic to obtain general acceptance at the present time; he points out cases, *e.g.*, psychoses due to trauma, exhaustion, post-febrile conditions, etc., which he thinks it would be unjustifiable to sterilise.

Dr. Ewart, in a paper on "Degeneracy and Eugenics," favours segregation as a means of limiting the multiplication of the unfit. He states that "the greater part of feeble-mindedness, insanity and criminality could be eliminated by segregation in one generation"; but he brings forth no evidence which justifies such a sweeping assertion.

In a recent number of the *American Journal of Nervous and Mental Diseases* a paper appeared in which the author worked out the inheritance of insanity on Mendelian lines. The cases quoted, although too few for any definite conclusions to be drawn, fitted into the Mendelian table remarkably well. But this is treating all the different disorders of the most complicated and delicate organ in the body as though they were a unit quality. It treats unsoundness of mind in human beings like the simple quality of tallness in sweet peas or coat colour in

animals. It would be as fair to work out a table of thoracic disease irrespective of what organ within the thorax was affected ; and it is not improbable that such a table might show figures which would fit in with Mendelian expectations of a unit quality.

One thing common to all these papers is the stress they lay on hereditary mental taint as a causal factor in insanity, and, as most observers have pointed out, the importance of heredity is understated in all available figures.

Anyone who works amongst the mentally defective or who studies the problem of insanity cannot fail to be convinced of the importance of heredity as a factor ; but can it be shown that any practical method of sterilisation would materially decrease insanity ? Is there a case for sterilisation from a eugenic standpoint ?

The present investigation was undertaken to see what proportion of our recent admissions would not have been born if our ancestors for the last three or four generations had sterilised every patient before he or she was discharged from the asylum.

With this object in view I have been very carefully through all the male cases that were admitted into Long-Grove Asylum in 1910, obtained as much history of them as possible, and have attempted to trace their insane relatives. The numbers so dealt with are too small to draw any very definite conclusions, but the figures are certainly not without interest. During 1910, 324 men were admitted into Long-Grove ; out of this number in 88 cases no history was obtained, or such history as was obtained was grossly defective ; of the remaining 236 cases 118 gave a family history of mental defect (excluding nieces, nephews, and offspring), which works out at exactly 50 *per cent.* In 65 cases there was a history of insane heredity, 34 being direct heredity and 31 collateral. The large majority of these 34 insane progenitors were certified, but supposing they had all been sterilised before they had been discharged in only 3 cases would it have prevented the appearance of the patient under consideration ; in all other cases the patient (or his parents or grandparents) was born prior to the certification of the insane progenitor. In two of these three cases even it is doubtful whether sterilisation would have been effective ; they were both recurrent cases who broke down more than once at the puerperium, and although there is no doubt that they were

insane prior to the birth of the patient, diligent inquiry has failed to discover whether they were certified or not.

The following is the tabulated form of the cases I have examined, and for the sake of comparison I have copied Dr. Stansfield's table of Bexley cases and a portion of the table of the Commissioners' Blue Book.

Cases examined	324
No family history	88
Family history mental defect denied	118
" " of mental defect	118
" " insane heredity direct	34
" " " " collateral	31
Neurotic, eccentric and epileptic	20
Alcoholic heredity	33

Dr. Stansfield's Cases.

	No. of cases admitted.	Family his- tory of men- tal defect ascertained.	History of mental de- fect denied.	No family his- tory obtained.	History of parents alcoholism only.
Males	3561	690	723	2007	161
Females.	3600	965	1006	1457	102
Total.	7161	1655	1729	3464	263

Commissioners' Report, 1910: Giving the Percentage to the Yearly Average Number of Direct Admissions during Two Years.

	Males.	Females.
Insane heredity	20·6	25·2
Epileptic heredity	1·4	1·8
Neurotic and eccentric	1·5	2·2
Alcoholism	5·0	5·5

This gives a family history of mental defect in 28·5 *per cent.* of males and in 34·7 *per cent.* of females, an average of 31·6 *per cent.*

An interesting point in connection with these figures is the fact that of the 118 cases mentioned who had a history of hereditary mental defect, in no less than 29 cases there were two relatives defective and in 9 cases three.

The similar table in the Commissioners' Report for 1910

shows 31·6 *per cent.* of hereditary taint in the new admissions, but this includes those patients of whom no history can be obtained or whose family history is grossly defective ; it is probable that if this figure was doubled it would be nearer the truth. Of the 3,697 cases quoted by Dr. Stansfield where a history was obtained 51·7 *per cent.* showed a history of mental defect or parental alcoholism.

If the overwhelming figures which support the utility of vaccination from a national public health point of view fail to convince a large body of anti-vaccinators that it is justifiable to make vaccination compulsory, what of the figures in support of sterilisation ? It has yet to be shown that this operation would materially reduce the number of the insane.

The truth of it is we have no statistics of insanity that are of any practical use. In the tables published annually by asylums and by the Commissioners the defective histories swamp and entirely vitiate the good ones, and no table gives any information as to the normal relatives or offspring of the psychopathic.

What is required is a collection of detailed family histories giving as much information as possible about both normal and abnormal members of the family. If every asylum would collect even a few of these annually and give them to a statistician they would be really valuable, but the present asylum statistics are almost useless.

All asylum medical officers are struck with the large proportion of degenerates amongst the relatives of insane patients. The motley crowd that visit weekly are a remarkable object lesson of physical and mental stigmata. The blind, the deaf and the deformed rub shoulders with the paralysed, the lame and the luetic ; many of them stammer or lisp, some can scarcely talk coherently, others are dull and annoyingly stupid or mulishly obstinate ; they exhibit numerous functional spasms and tics ; squint and asymmetry of features are common, their bodies are unclean, and their breath often savours of strong drink. They are degenerates, but they are not insane ; they can conform to the ordinary social laws and they can earn a livelihood. The proposals advanced for sterilisation and segregation would not touch this class, which is probably one of the main sources of our asylum population.

If we are unable to show at present that sterilisation would

be any material benefit to the race from a eugenic point of view, are there any circumstances in which we, as alienists, are justified in recommending the operation? Personally I think there are. In the first place I think that any woman who has had a mental breakdown at childbirth should have explained to her the risk she runs of a second attack should she again become pregnant, the risk not only of a few months' treatment in an asylum but of permanent insanity, and should be offered the opportunity of being sterilised.

If resection of the tubes is justifiable in the case of a deformed pelvis where a viable child can be born only by Cæsarean section, and at great risk to the mother's life, surely it is justified here apart altogether from consideration of what the offspring of such mothers are likely to be.

In the second place there are some imbeciles of both sexes who, although definitely certifiable, are quite capable, under favourable conditions, of living a useful life outside; but they cannot be considered as normal citizens. In the female the puerperium and the worry of young children, and in the male the difficulty of meeting the expenses of a family would probably lead to a breakdown of a serious nature, added to which it may be argued that an imbecile is not a suitable person to look after and educate young children in their most impressionable years.

Here, I think, we have two cases where we can recommend or even urge sterilisation for the benefit of the present generation apart from consideration of its effect upon future generations.

The conclusions from this paper are.

Firstly, admitting inheritance to be the most important factor in mental constitution, it has yet to be shown that any practicable scheme of sterilisation would materially diminish the normal increase of insanity.

Secondly, we have no right to hold out a hope of material decrease from the statistics at present at our disposal.

Thirdly, there is urgent need of better record of family histories, which should be kept separate from the present useless conglomeration which compose our statistics.

Fourthly, the suggestion is made that the chief danger from the eugenic point of view is the large class of mental degenerates who are not insane.

Fifthly, the opinion is expressed that sterilisation ought to be recommended in some cases of mental disease quite irrespective of the eugenic standpoint.

DISCUSSION,

At the Quarterly Meeting in London, November 21st, 1911.

The PRESIDENT said the meeting had listened with very great interest to the most valuable paper of Dr. Clarke, which was an effort to place upon somewhat reasonable, scientific and arguable lines the facts with regard to the inheritance of insanity. As the author remarked, there was much extremely loose talk on those subjects, and to have some statistics upon which a sound opinion could be based was a most important matter. There must be many who would like to discuss the paper, and he invited such to speak.

Dr. STANSFIELD said he would respond to the President's invitation to speak, as the paper which he (Dr. Stansfield) read before the South-Eastern Division had been referred to and quoted. He was glad that the paper which he had read should have caused others to be written on the subject, because it was a matter which, in his opinion, should be very carefully considered. There was no doubt in the minds of those who had to deal with large numbers of the insane but that something must be done to stem the flow of the mentally unfit, and they only disagreed as to the method to be adopted. The great importance of heredity as a factor must be recognised, but it had to be acknowledged that our information on the subject was not as full and exact as was to be desired. Some years ago he suggested to the Asylums Committee of London that a special officer should be appointed whose duty it would be to go round to the homes of the patients and see the relatives for the purpose of estimating the amount of uncertified insanity among them. So far this had not been done, and he did not think that this information could be otherwise obtained. He hoped that before long he would be in a position to attack some of Dr. Clarke's statements and statistics, though he was not prepared to do so at that meeting.

Dr. EDEN PAUL thought the subject so important that the Association ought to hear the opinions on it of some of the more experienced asylum officers, and what they thought of Dr. Clarke's statements. He wished to speak from a very general point of view. It was, unfortunately, true what Dr. Clarke said as to our knowledge being insufficient, that there were not yet available a large enough number of full family histories to enable one to say definitely how much insanity was the direct result of inheritance, and how much the sterilisation of patients subject to relapsing insanity before they left the asylums would do to check the apparent increase of insanity. But his view was that they ought not to hesitate to express an opinion merely because there was not yet available the full information which would be so desirable, but which he hoped would be obtained before long. It must be remembered that the public, which was apparently awakening to the importance of the subject, was looking to the members of that specialty to show what should be done in the direction of improving the human stock, or, looking at the matter in another way, to prevent or stop its degradation. The public considered that the members of that Association had some special knowledge for guidance on the matter. Dr. Clarke's opinion seemed to be that the experience of breeders of animals was not of much value as applied to human beings. He found it difficult to agree with that from a general point of view. It was the experience of animal breeders which directed the attention of people to the subject. The point was that there was a desire to raise the *average* of the human stock. It was true that the animal breeder was often breeding for the purpose of producing certain highly specialised types, but not always. It was the desire of people interested in this subject to raise the average of the human stock, but the experience of breeders showed that this could not be done while we allowed our more inferior stocks to breed faster than the others. He thought there was sufficient evidence that this was taking place now, and there seemed enough evidence in regard to mental defect to show that that would soon become a more serious problem than at

present, unless the continued over-breeding of mental defectives was checked. Members would agree with Dr. Clarke that, as far as knowledge was available which could be applied to the question of sterilisation, that process was not required so much for those ordinarily spoken of as insane as for those who came into the world without the power of acquiring average mental capacity, that is to say, imbeciles and feeble-minded people. It was already proved that those people tended, in present conditions, to have larger families than did those whose minds were regarded as being up to the normal standard. And obviously, as the tendency to limit families became more general—and there was evidence that such artificial voluntary limitation was becoming more general year by year—the disparity between the families of those whose mentality was up to the average and the family of the feeble-minded would be very much greater, and the present tendency to breed to excess from mentally defective stocks would be far more marked in the near future if no well-planned measures were adopted than at present. Dr. Clarke's paper was on sterilisation of the insane, but the question arose also in regard to feeble-minded people and higher grade imbeciles, whether sterilisation was necessary in their case, or whether segregation would not better meet the difficulty with which society had to deal (as far as congenital defectives were concerned, as contrasted with the insane), rather than actual sterilisation. In the present state of our knowledge he thought the most important point which Dr. Clarke's paper had brought forward was whether there was now sufficient knowledge to justify members of the profession recommending the offer of sterilisation of the relapsing insane before they were discharged from asylums. He thought it would be a long time before compulsory sterilisation of such persons would be agreed to, but it would be possible, once the matter was recognised and recommended by the profession, to offer voluntary sterilisation as a proper measure to apply to the relapsing insane. In any case, in regard to this Society, it was not a question of advocating any large or sweeping measure, but of expressing the view for or against advocating small beginnings and endeavouring to guide public opinion, which was already ripening on the question, in the right direction.

Dr. WOLSELEY-LEWIS desired to thank Dr. Clarke for his very suggestive paper. He was very glad the author recognised, as he thought all members of the Association did, the primary fact that some 50 *per cent.* of the insane in asylums had a hereditary history of either actual insanity in some members of the family, or a neurotic condition of some kind or other. He agreed with Dr. Clarke that at present the profession had no sufficient argument with which to go to the public and base upon it a suggestion for the sterilisation of insane people as the proper course to pursue. He thought there was no doubt, however, from the single fact that 50 *per cent.* of the insane have such a bad heredity, that a certain number of those cases should be segregated, and permanently so. And not only should that be done in the case of the insane, but also in some of the allied conditions, such as the habitual criminal and the inebriate. It was well known that all those had to be classed together, and that under the existing laws of the country a large number of these people were taken in for a short time, that they then left and bred their kind outside. And those kind were condemned to a disability which was bound to be a source of great expense to the ratepayer in the future, as it would be necessary to increase the size of the establishments in which they had to be kept. He thought that the case for segregation of the relapsing insane and for imbeciles and those forms of insanity which were hereditary had been made out.

Dr. BOYCOTT regarded the compulsory sterilisation of the insane as impracticable. At the present day the liberty of the subject was held so high that it would be practically impossible to get any government to listen to a proposal of this sort. He was not now expressing an opinion as to whether sterilisation for such subjects as the insane was good or bad, but he was referring to the hopelessness of advocating such a measure. He therefore thought the best course was to consider the question of the permanent segregation of these people. Thousands of years ago, before the human race was as advanced as it was now, when people became ill it was reckoned as simply a disability; nobody knew quite what was the matter. That seemed to indicate the present position of their knowledge of insanity. Dr. Clarke referred to the present statistics which had to be furnished, and said they were practically useless. He, Dr. Boycott, agreed that they mostly were useless with regard to the particular form of insanity. When it was stated that

there was a hereditary history of insanity, it should be extended to what particular kind of insanity there was transmitted from father or mother or ancestor. It seemed to him that if they had statistics which lumped all the insane together it was not quite scientific, and it would be very desirable if possible—he admitted it would be difficult—to have statistics setting forth the form of insanity inherited, for that would do much to clear the subject up.

Dr. COLLINS desired to make a suggestion on the general subject, namely, that it was not at all certain that insanity was really increasing at the alarming rate which certain statistics appeared to show. It must be remembered that education was increasing, and there was now a higher standard of life obtaining, and that meant a certain number less of private patients and an increase among pauper patients. It must also be considered that there was much better accommodation now in pauper asylums, and that accordingly many people now availed themselves of that accommodation who otherwise would not have done so. He noticed that the birth-rate continued to fall, and it appeared to fall more among the fit than among the unfit. Therefore, as matters now stood, would it not be better to press for the granting of some endowment of the fit who produced healthy children rather than sterilisation of the unfit?

Dr. HUBERT BOND desired to thank Dr. Clarke for his paper and for the time which he devoted to diving into the statistics of Long-Grove Asylum. He, Dr. Bond, took this opportunity to apologise to many of his colleagues for the numerous letters which, in the course of collecting these statistics, they had received from him, all of which letters, however, were cheerfully answered. It had been his custom ever since the opening of Long-Grove, in every case that had had a previous attack in some other asylum, to forward a letter to the superintendent of that asylum asking for particulars of such attack. And in regard to any relatives who were said to have been insane, he had also forwarded letters of inquiry to the various asylums where such relatives had been. Thus the case-books at Long-Grove showed not only the fact that so many relatives had been insane, but so far as he had been able to obtain it, the form of their mental disorder and the age on first attack. Therefore, thanks to the help he had received from others, there was a multitude of information gradually accumulating there. He was glad Dr. Clarke had made use of that information. All his colleagues at Long-Grove were much interested in the subject now being discussed, and it formed the topic of numerous conversations round the office fire. He believed that the conclusions arrived at by Dr. Clarke represented the joint feeling of the medical staff there with, perhaps, the exception of the fifth, in which Dr. Clarke went further than he (Dr. Bond) was prepared to, and spoke of any woman being advised, after an attack associated with child-birth, to remember the risks. Just before Dr. Collins got up to speak, he (Dr. Bond) had made up his mind to ask those present whether they had seen in the daily papers that day, particularly the *Times*, the remarks about the falling birth-rate. He regarded that as a most serious matter; and he thought that when they set about trying, by surgical or other means, to limit the procreation of any part of the future generation, that question of the falling birth-rate should not be forgotten, particularly as there was not available any real proof that such a procedure was going to appreciably alter the number of insane. He thought it would be more practical for some of those interested in the subject to bring forward concrete examples, always using examples in which the heredity had been fully worked out for, if possible, three generations. Such examples should be brought forward on the one hand by those who advocated such procedures as sterilisation as illustrating their point of view, and other examples should be submitted by those who are opposed to these measures. A meeting such as this was well competent to consider them. If that were done he believed the number of instances in which any such meeting, resolving itself into a Committee, would decide to recommend operation would be excessively few or even *nil*. And if there were only very few, was there, then, any justification in giving assent to principle by sanctioning it in a few isolated examples? It would, in his opinion, be opening the door to all sorts of possibilities, some of them discussed better in Committee than in General Meeting.

Dr. THOMSON considered that discussions concerning sterilisation, lethal chambers, and similar tinkering at that great subject were futile. Certainly sterilisation should not be added as one of the horrors attaching to certification,

because it would defeat its own ends, even if it were desirable. If people were to know that certification of insanity involved, or might involve sterilisation, it would lead to still further evasion of certification than occurred at present. They were now, for the first time, attacking the subject from the eugenic standpoint. Now, for the first time, they were knowing, or were about to know from the inspection of school children, the actual numbers of the defective young. That information had never been to hand before. And early legislation on the subject of the feeble-minded had been promised, laws regulating the control and care of such people. When it was known who among the rising generation were defective and feeble-minded, and when it had been decided to deal with them, there would be some hope for the future, but any tinkering by such methods as sterilisation, or dealing with those who were already condemned, was futile. He looked forward to the time when, with the knowledge of which children were defective, and supported by legislation, there was hope for some improvement in the race and the diminution of insanity from the eugenic point of view.

Dr. SOUTAR considered that Dr. Clarke's interesting and valuable paper and the discussion which followed had been the means of eliciting the important fact that so little is definitely known as to the rôle played by heredity in the production of insanity that the profession was not in a position to advise the public on this matter. The question as to what is the influence of heredity in the production of mental disease was undoubtedly one of the most difficult which confronted the physician. The statistics which had been referred to did not afford much help. These were compiled from the yearly returns made with much labour by all asylums, but they were vitiated by the fact that the heredity tables included both those who came of a thoroughly bad stock and those who came of a stock in which insanity was only an occasional occurrence. Some stocks were so absolutely bad that they produced only neurotic or insane progeny. In others—and amongst private patients one had the opportunity of tracing family history through several generations—only isolated instances of mental disorder could be found amongst a large number of highly competent men and women who did useful and important work. In the tables no differentiation was made between these two classes, yet there was a real difference in the value attached to heredity as a factor in the production of insanity in each case, and this consideration could not be ignored when those statistics were taken as a justification for such a proposal as the sterilisation of the insane. He heartily agreed with the suggestion which was made by Dr. Clarke and Dr. Bond that personal and family histories should be taken more carefully and fully, apart from those recorded in the ordinary asylum statistical tables. There then would be a likelihood of reaching conclusions which would be much nearer the truth with regard to heredity. In the present state of knowledge the profession was not in a position to recommend segregation of those who had been insane—he was not now speaking of the feeble-minded—or sterilisation, or any other extreme measure of the kind. That was the point which the paper and the discussion emphasised. It was true that an hereditary influence had been traced in 50 *per cent.* of insane patients, but what of the other 50 *per cent.* in which no such influence played a part? It would seem as if there were factors about which we know little, of which some tend to correct a faulty ancestry while others are capable of producing mental disorder in those who come of an untainted stock. Ill-health, of which mental disorder may be but one manifestation, was often the outcome of bad environment, and in the slums of our large cities one could see some of the factories for the production of the insane. He thought that improvement in environment and of the general conditions of life offered a more practicable and hopeful method of diminishing the incidence of insanity than did either segregation or sterilisation with all the difficulties attendant on selecting the unfit.

Dr. HAYES NEWINGTON reminded members that from their special point of view they saw so many cases of bad heredity that they were apt to take a gloomy view of the matter. But, taking the broadest point of view, he thought it was well to consider the union of insanity and sanity as not necessarily producing bad results. If Dame Nature had ordained that everybody tainted with insanity would perpetuate the disease, we should have been degenerates thousands of years ago. The world had been going on for many generations, and yet he did not know that we were worse than our predecessors, but probably, in some respects, we were rather better. Was it not possible that Nature ordained that if sanity and in-

sanity were combined it was for the purpose, not of producing insanity in the offspring, and so pulling sanity down to the level of insanity, but rather it was in the direction of raising insanity to the level of sanity. There must be some remedy of that nature at work, and he thought that before trying to interfere with the laws of reproduction, people should have continually in mind that we were in the hands of Nature, that we could help Nature a good deal, but that we were not justified in going as far as sterilisation in the effort to defeat the proceedings of Nature.

Dr. G. M. ROBERTSON said the subject was a very important one, and the whole problem rested largely on the question of heredity. As Dr. Hayes Newington had said, nature stepped in and did more than man was ever likely to do in an artificial way to check the production of the unfit. On studying the forms of insanity which were most hereditary, it was found that those occurred at an early age, and that the most hereditary forms were imbecility, dementia præcox, and adolescent insanities. So the largest number of hereditary insanities occurred in persons at an early stage, and those people did not have offspring. Thus the evil effects of heredity were not so unfortunate or wide-spread as they would otherwise be. There might be other ways of checking those evil tendencies than the extreme measure of sterilisation. Was it not the fact, as Dr. Hayes Newington pointed out, that the tendency was not towards disease, but towards recovery, towards the re-establishment of the normal, not towards perpetuating the abnormal type. If instead of the Association forming itself into a Society for the sterilisation of individuals, it formed itself into one of the nature of a marriage bureau, and selected suitable partners for those who showed defects, and insisted upon them marrying physiologically healthy individuals, there would be a tendency towards the healthy type, not towards the unhealthy. In that aspect he considered that the question was a much more practical one than in the other. He had only once had it suggested to him that a patient should be sterilised; but on more than one occasion he had been asked whether a certain individual should marry. He thought they should insist on the marriage of neuropathic individuals with those of healthy type. Another practical point was that which had been mentioned already, as to the necessity of a more thorough investigation of family histories of the patients who came to asylums. That had been done in America to a much greater extent than in this country. It was called field-work. A field officer was appointed, who visited the homes of these people who were insane, and investigated the histories and environments, and in that way much very valuable information was obtained. He thought that in a place like London, where there was such a scope for work of that character, there should be a department of the London County Council Asylums under the charge of a medical man, who should have a large staff of social workers, who would inquire into the environments and histories, and trace out every person who showed any defect. In that way there would be acquired material of a valuable kind which could be used with great effect towards the solution of that difficult question.

The PRESIDENT, before asking Dr. Clarke to reply, remarked that there were many points in the paper and the discussion which he would have liked to deal with, but in view of the combined discussion which was about to take place, the time for commencing which had already passed, he would forbear.

Dr. CLARKE, in reply, said he agreed with the remarks of Dr. Soutar. Dr. Eden Paul considered that more notice should be taken from the lessons derived from breeding animals. He quite agreed with that. His point was that the animal breeder had nothing to do with the mental side of the question. He agreed that imbeciles, if allowed among the community at all, should be sterilised. The question was whether they should be let out at all, or whether they should be let out and prevented from reproducing. One speaker did not agree that it was practicable to bring in any law permitting of sterilisation, but he disagreed with that. He thought it was practicable if good reason could be shown for it. He believed the State would be ready to legislate for it if a good cause could be shown. With regard to Dr. Robertson's suggestion as to the marriage of neurotics with healthy people, he, Dr. Clarke, never advised people to marry, whether they were neurotic or not. He agreed with Dr. Collins' endowment scheme.

Some Statistics about Sterilisation of the Insane. By
A. W. DANIEL, M.D.Camb., Senior Assistant Medical
Officer, London County Asylum, Hanwell.

THE prevention of the propagation of degenerates, more especially of the insane, is a matter of almost daily discussion among those interested in insanity, and it is also discussed and as a rule advocated in medical journals, asylum medical superintendents' reports, and even in the daily press.

This being so no apology is needed for the somewhat barbarous suggestion of the title of this short paper.

A word is needed as to the lines on which these statistics have been collected. It is clear that had it been the practice in the past to sterilise the insane before they were allowed to leave an asylum, whether recovered or not, then a certain number of those cases of insanity which exist at the present time would have been prevented for the reason that the sterilisation of the parents would have prevented the birth of the children who eventually became insane.

The object I have in view, then, is to show to what extent insanity could be prevented by such means as segregation or sterilisation.

I have collected all the cases showing a hereditary taint admitted to Hanwell Asylum during the years 1909 and 1910; of these all the cases of parental heredity have been carefully inquired into to decide whether the original admission, and hence the hypothetical sterilisation of the parent, would have prevented the birth of the child.

To determine this point it is necessary to know the date of the parent's first admission to, or rather discharge from, an asylum, and also the date of the child's birth.

In the statistical tables these dates are compared in columns 4 and 5, and the result is entered in the last two columns.

Such cases as the following cry for preventive legislation, but it must not be forgotten that the quotation of a few instances is not sufficient argument to bring forward for any drastic law; the instances must be of frequent occurrence to justify such a measure as sterilisation.

A patient was admitted to Hanwell last year suffering from epileptic insanity with marked deficiency in emotional control, doubtless due to congenital defect. The slightest indulgence

in alcohol caused epileptic seizures and complete loss of emotional control.

Removed from home surroundings she rapidly resumed her normal mental state. It is farcical to say that she had recovered, for the congenital defect was so apparent. Her husband pressed for her discharge, because he had no one to look after his seven children. Finally his urgent appeals were successful, and she was allowed out on a month's trial with a view to her ultimate discharge; she relapsed, however, at the end of five days owing to some slight indulgence in alcohol. It was too late, she was pregnant, and this in spite of warnings to and promises by both herself and her husband. The baby was born in this asylum, and to what prospects? Epilepsy, imbecility, insanity, either or all. And there are seven other children.

The second instance is really worse. C. G—, a male patient, was admitted to Hanwell some years ago; the form of his insanity was congenital imbecility; he was in addition a drunkard and suffering from phthisis. J. S—, a female patient, was re-admitted to Hanwell about the same time suffering from manic-depressive insanity.

Both male and female soon shook off their mental symptoms, met at the asylum dances, finally were discharged recovered, and married. The man did not return; the wife, however, returned twice after the births of her two children; luckily, at this point the man died of phthisis, but what about the two children. They are stated to be healthy by the mother, who writes to me from time to time, but their futures should be studied. Other instances could be quoted, but our data are not complete without the history of the children's lives, and these can only be studied by means of registration for the use of future generations. Unfortunately there is no such scheme in existence.

Returning now to the statistics, during the years 1909 and 1910 there were 394 direct male admissions and 416 direct female admissions, omitting aliens and only making one entry when a case has been admitted more than once during these years. The cases, then, under review total 810, but of these 810 there were 225 instances in which either there was no history or the history was so defective as to be valueless. Clearly a proportionate allowance must be made for these cases about whom no history could be obtained, for it can be

taken for granted that heredity will be as important a causative factor in these cases even though no history has been obtained. This correction will be made later.

The grand total of 810 is reduced by these 225 cases without satisfactory history to 585; of these 585 cases actual heredity of insanity was present in 250 cases, which is equivalent to 42·7 *per cent.* This can be shown in tabular form thus :

	Total cases under review.	No history obtained.	Cases with a complete history after deduction of last column.	History of heredity obtained.	Percentage of heredity in cases with full history.
Males .	394	112	282	121	42·9
Females .	416	113	303	129	42·5
Total .	810	225	585	250	42·7

Parental heredity was found 86 times, the father being the offending party 36 times, the mother 50.

A complete analysis of these cases is now given; the full statistical table for reference can be seen at the end of the text.

In statistics of insane heredity it will be found that not every case of insanity has undergone asylum treatment even though undoubtedly insane; nevertheless these uncertified cases go to swell the numbers of instances of heredity; the same remark applies to suicides. This is an important matter from the point of view of sterilisation of the insane, for in neither case would the person reported as insane have been subjected to sterilisation; there were 23 such cases among the 86, six of them being instances of suicide. This leaves only 63 cases to be further considered.

Of these 63 it was impossible to trace the parent's first admission in 26 instances, leaving 37 for statistical purposes. It is clear, however, that a proportionate allowance must be made for these 26 untraceable instances, seeing that both parent and child had been in every case inmates of asylums, although unfortunately and for various reasons their whole asylum history could not be traced with absolute certainty.

The 37 instances referred to are best shown in tabular form thus :

would of necessity be subjected to sterilisation in any hypothetical eugenic scheme. Doubtless with enlarged experience some forms of insanity would be recognised as less likely to be hereditary than others, insanities, for instance, dependent on toxic agencies, such as post-typhoid insanity, being less hereditary than recurrent insanities.

This, then, is the state of affairs : some 6 cases a year would be prevented out of an admission total of 405, a mere 1·5 *per cent.* of the admissions.

One can consider this question from rather a different point of view ; among some 2540 patients resident at Hanwell there are some 81 instances in which both parent and child are or have been recently resident at Hanwell or one of the other London County Asylums. I should state here that an inquiry on insane heredity, initiated by Dr. Mott, has rendered it an easy matter for me to give these figures. These cases have been dealt with in a similar manner to the last, *i.e.*, the date of the parent's first attack of insanity and discharge from an asylum has been compared with the date of birth of the child.

The figures obtained can be briefly put down in table form thus :

	Son.	Daughter.	Total.
Father transmits insanity to	10	19	29
Sterilisation would have prevented birth of	1	1	2
Mother transmits insanity to	17	35	52
Sterilisation would have prevented birth of	0	3	3
Parent transmits insanity to	27	54	81
Sterilisation would have prevented birth of	1	4	5

Once again it will be noted that the figures are most disappointing to anyone who would advocate legislation to prevent insanity by such means as sterilisation. The reason is this : insane heredity is only one of the many factors in heredity that have to be taken into consideration ; the deduction is that any legislation to be effective must be aimed, not at the insane alone, but at all degenerates, whether so in mind or body. There is one interesting fact about these 81 cases, and that is that in 49 (*i.e.*, in over 60 *per cent.*) the parental insanity occurred about or after the climacteric; this naturally refers

more especially to women, the age of whose climacteric I have taken to be 45 ; in men the age of this period has been reckoned at 55.

Paternal heredity 29 cases, over 55 in 10 instances.

Maternal „ 52 „ over 45 in 39 „

At first sight it might be thought from this study of parental heredity that insane heredity is not of such vital importance in the production of insanity as is usually supposed, but this would be a fallacy due to considering the question from too narrow a point of view. A family may be absolutely free from the taint of insanity (*i.e.*, no member of the family has ever been certified as insane), and yet teem with instances of mental and physical degeneracy, hysteria, epilepsy, criminal imbecility, etc. ; it should be recognised that these are of equal importance with insanity when arising among the forebears.

It is usual to point out that statistics as regards insane inheritance are bound to understate the importance of heredity for such reasons as shame at the disclosure, faulty histories, etc. Personally, I have no doubt that practically in every case heredity could be traced, not necessarily an actual insane inheritance, but the appearance of insanity's sisters, epilepsy, criminality, marked eccentricity, imbecility, and other forms of degeneracy, which pass unnoticed by the immediate relatives because the whole family is on much the same mental level.

Anyone who sees large numbers of the relatives of the insane must have been struck by the fact that the relatives are below the average both physically and mentally ; one occasionally sees a person of fine physique among an insane patient's blood relations, in the same way that one occasionally sees a lunatic of fine physique, but in either case it is the exception to do so.

On the other hand (and this is not usually pointed out by writers on insanity), fallacies are apt to creep into statistics, and lead to an over-statement of the importance of the heredity of insanity, as the following case will exemplify :

A child was admitted to Hanwell suffering from epileptic imbecility due to some gross brain lesion sustained at birth ; the mother was also admitted within a few months broken down in health and depressed owing to the worry of nursing and the death of her husband. Obviously the child's imbecility cannot justifiably be referred to maternal insanity, but must be referred to the injuries at birth. Again, many cases of arterial

degeneracy in the parent are followed by insanity in the child; a father, for instance, enters an asylum suffering from dementia post apoplectica, and one of his children becomes insane, or more often has become insane many years before the parent's apoplectic seizure. Is this, then, true insane inheritance? Surely not. The child has inherited a tendency to degeneracy, and is actually a member of a degenerate or decaying family; but this stigma of arterial degeneracy is of exactly the same historical importance in such a case as any other sign of physical degeneracy such as phthisis.

The point I wish to make is that insanity may be only one of numerous signs of degeneracy in a degenerating family; the inheritance is, in fact, not so much the inheritance of insanity as the inheritance of degeneracy.

This degeneracy may show itself in various forms, such as arterial or renal disease, epilepsy, insanity, intolerance of alcohol, liability to tuberculosis, etc.

The deduction as regards sterilisation is this: even if epileptics, lunatics, imbeciles, and criminals were all prevented from reproducing the species, yet insanity and other forms of degeneracy would still occur in degenerating families.

The degeneration of the family is as natural as the death of the individual.

The question to answer is, Should Nature's methods of dealing with degenerate families be hastened by sterilisation?

To answer this question satisfactorily much fuller knowledge must be obtained about degeneration in families, and it is impossible to obtain this without taking the family history in the form of a pedigree with full particulars of each member of the family.

It is true that each pedigree takes a full hour and more to obtain, and necessitates a very lengthy cross-examination of the informant, but the particulars so obtained are frequently most instructive.

I should like to register an appeal that these pedigrees should be collected in large numbers and from time to time be subjected to analysis and published.

This inquiry, and also an inquiry into the future life-history of children born of insane parents, might well be undertaken by a special department for registration under the control of the Commissioners in Lunacy.

Before answering the question as to whether sterilisation is justifiable or not, one must briefly consider the various factors at work tending to the degeneracy of the race, and hence to the increase of insanity, crime, imbecility, etc.

I need not enumerate these, as the knowledge that such factors as overcrowding, insanitary dwelling places, poor wages, and therefore under-fed children, tend to degeneracy, forms the very ABC of this subject; legislation, too, is constantly being applied by every government to improve the status of the masses, and more especially does legislation deal with the health and education of the children.

Philanthropic man, however, occasionally interferes with Nature, with possibly dire results. Infant mortality, for example, is always heavy, but has been of late years much reduced.

Nature is generous always in the propagation of the race, whether of man, bird, fish, or plant, and in every case there is a struggle for existence, in which the fittest survive and the weakly die. A heavy mortality in early life represents one of Nature's methods of removing the unfit, for though some robust infants may die, yet the heaviest mortality will fall on the weaklier children. Man does his utmost to frustrate Nature, and saves countless lives which Nature would have removed, and removed for man's ultimate benefit.

The philanthropic intention is good, but these degenerate children are given rights of citizenship equal to those of the robust, equal rights, in other words, to reproduce in their children their weakly characteristics, whether physical or mental.

We must recognise, then, that many degenerates will thus escape Nature's harsh rule, *i.e.*, that the fittest survive in the struggle for existence, and take steps accordingly to prevent such of these as are degenerate from reproducing their faults in their offspring. They have been given life; let them not give life.

Man improves all plants and domestic animals by careful crossing and breeding, he brings out useful qualities, such as egg-laying in fowls, and carefully excludes such defects as epilepsy in animals; but the knowledge so obtained, man, the highest of all, fails absolutely to apply to himself; epileptic mates with epileptic, criminal with criminal. The aim of

eugenics is a general improvement of the human stock, and incidentally the prevention of insanity, and in fact of all forms of degeneracy by careful selection of the parents most suited to reproduce their species. Theoretically nothing could be more perfect, and public opinion has done much among the middle classes to prevent epileptics, imbeciles, and even those tainted with insanity from intermarrying; but this has not yet reached the lower classes. Among them the epileptic finds no mate among the physically fit, and is driven to mate with one as degenerate as himself; the criminal, too, finds no mate among the honest. Thus in practice, to satisfy the natural instinct of reproduction epileptic mates with epileptic, imbecile with imbecile, criminal with criminal, and they perpetuate their defects, both physical and mental, indefinitely.

Here, however, Nature not infrequently steps in and ensures the termination of this bad stock either by diseases such as phthisis or by such a degree of idiocy in the children as to lead to impotence. Nature's methods, however, are slow, and masses

TABLE I.—PARENTAL HEREDITY FOR YEARS 1909 AND 1910 AT HANWELL ASYLUM.

Summary.

	Total cases under review.	Number of these in which a full history was obtained.	Number of these in which a history of insane heredity was obtained.	Percentage of insane heredity in cases with a full history only.
Males .	394	282	121	42·9
Females .	416	303	129	42·5
Total .	810	585	250	42·7

Parental Heredity.

	Son.	Daughter.	Total.
Father transmits insanity to . . .	21	15	36
Mother transmits insanity to . . .	22	28	50
Total	43	43	86

of degenerates are produced before the ultimate disappearance of the degenerate stock. In a sense, too, it never disappears, as by intermarriage it will taint previously healthy stocks.

The question naturally arises whether we are justified in assisting Nature by preventing the birth of degenerates. Surely we are, provided that some practicable method can be proposed

Father Transmits Insanity to Son.

Father.				Son.				Would parental sterilisation have prevented son's insanity?	
	Age.	Form of insanity.	Date when first in asylum.	Date of birth.	Form of insanity.	Age.		Yes.	No.
W. S—	43	General paralysis	1896	1885	Delusional insanity	24	S. J. S—	—	1
J. K—	78	Senile dementia	1907	1869	Melancholia	40	G. K—	—	1
W. H. C—	38	Paranoia	1887	1878	General paralysis	31	H. T. C—	—	1
W. H. A—	45	"	1893	1871	Paranoia	38	W. J. A—	—	1
J. T. G—	33	Melancholia	1865	1865 be- gotten in 1864	Delusional insanity	44	J. G—	—	1
J. D—	53	Mania	1888	1892	Dementia præcox	17	W. D—	1	—
M. S. C—	55	Melancholia	1909	1896	Epileptic insanity	16	J. S. C—	—	1
								1	6
Total								7	
Father was insane, but never in asylum								7	
Father's attack of insanity could not be verified								6	
Father committed suicide								1	
Total								21	

for dealing with this degenerate mass. Sterilisation is sure in its action, but I personally consider it to be absolutely impracticable. I can imagine no government strong enough to bring forward a measure which would affect the immediate relatives of a large proportion of the electorate, for degeneracy ramifies through every class from the degenerate nobleman to the epileptic pauper. Sterilisation, too, would be a measure more

fitted for a Spartan government than for a modern government with its altruistic ideals. Segregation is far more practicable, but to be completely effective it must be applied to such a large proportion of the population that complete segregation must be regarded as impracticable on account of the enormous financial burden involved. It might, however, be applied to the most degenerate of the population, though it would be hard to draw

TABLE I (continued).—*Father Transmits Insanity to Daughter.*

Father.			Daughter.				Would parental sterilisation have prevented daughter's birth?	
Age.	Form of insanity.	Date when first in asylum	Date of birth.	Form of insanity.	Age.		Yes.	No.
W. J. H— 30	Recurrent mania	1839	1862	Recurrent mania	36	E. P—	1	—
R. G— 62	Dementia	1878	1847	Melancholia	62	M. D—	—	1
J. W— 51	Melancholia	1893	1870	"	41	L. G—	—	1
C. L— 40	General paralysis	1890	1875	Epileptic insanity	35	F. J—	—	1
J. S— 55	Melancholia	1881	1852	Alcoholic confusion	55	K. S—	—	1
C. C— 36	Mania	1890	1880	Lactational melancholia	29	M. T—	—	1
T. J. F— 61	"	1897	1864	Climacteric melancholia	45	E. F—	—	1
J. T. B— 41	Congenital imbecility	1909	1894	Congenital imbecility	15	F. M. B—	—	1
J. W— 48	Melancholia	1877	1871	Melancholia	38	A. W—	—	1
							1	8
Total							9	
Father's attack of insanity could not be verified							5	
Father committed suicide							1	
Total							15	

a definite line between those to be affected and those not; it might be applied to all epileptics, habitual drunkards and criminals, and also to the recurrent insane.

This partial segregation, combined with the eugenic principles so ably advocated by the late Sir Frederick Galton, would do much to stamp out the worst forms of human degeneracy.

The immediate object of this paper, however, is to discuss the

advisability of the sterilisation of the insane before their discharge from an asylum.

Are the figures I have already demonstrated sufficient to warrant any action, that is to say, are we as medical men justified in recommending sterilisation to prevent such a small proportion of insanity as 1.5 *per cent.* of the total admissions? Everybody will agree that the answer is in the

TABLE I (continued).—*Mother Transmits Insanity to Son.*

Mother.				Son.				Would parental sterilisation have prevented son's insanity.	
	Age.	Form of insanity.	Date when first in asylum.	Date of birth.	Form of insanity.	Age.		Yes.	No.
E. N—	61	Melancholia	1889	1860	Melancholia	50	J. N—	—	1
M. J. B—	64	Recurrent mania	1899	1873	Chronic mania	36	W. H. B—	—	1
M. A. C—	52	Recurrent stupor	1894	1882	Mania	29	W. C—	—	1
M. W—	40	Delusive mania	1901	1887	Melancholia	23	F. J. W—	—	1
E. H—	32	Melancholia	1896	1889	Dementia præcox	22	A. E. C—	—	1
R. A. E—	57	"	1909	1875	Melancholia	35	L. E—	—	1
A. D—	53	General paralysis	1909	1879	Congenital imbecility	41	J. P. D—	—	1
L. M—	63	Melancholia	1909	1880	Ditto	30	E. M—	—	1
								0	8
Total								8	
Mother was insane but never in asylum								4	
Mother's attack of insanity could not be verified								9	
Mother committed suicide								1	
Total								22	

negative. So carefully have I collected these figures that I am convinced anybody can obtain corroboratory ones from studying any other asylum records.

The next question we must ask is this: are we justified in recommending sterilisation in isolated instances such as I have described earlier in this paper? Unfortunately we have no certain knowledge of the life-history of the children of such parents; but no one can doubt for a moment that they will be

in large proportion degenerates, and therefore it would appear to be justifiable to prevent such parents from further reproduction of this degenerate offspring.

TABLE I (continued).—*Mother Transmits Insanity to Daughter.*

Mother.				Daughter.				Would parental sterilisation have prevented daughter's insanity.	
	Age.	Form of insanity.	Date when first in asylum.	Date of birth.	Form of insanity.	Age.		Yes.	No.
C. M. M—	35	Mania	1887	1890	Dementia præcox	20	C. T—	1	—
M. A. F—	67	Senile dementia	1910	1882	Melancholia	27	A. P. F—	—	1
E. P—	36	Recurrent mania	1898	1890	Dementia præcox	18	M. A—	—	1
G. M. W—	56	Alcoholic confusion	1899	1868	Alcoholic confusion	34	G. F—	—	1
C. M—	44	Climacteric insanity	1860	1844	Melancholia	56	C. M—	—	1
C. G—	45	Mania	1906	1893	Melancholia and congenital defect	17	E. G—	—	1
A. R—	30	Recurrent mania	1856	1863	Climacteric melancholia	46	E. R—	1	—
R. G—	37	Melancholia	1870	1874	Melancholia	35	S. G—	1	—
E. P—	51	"	1909	1882	Congenital epileptic	27	V. P—	—	1
N. U—	64	Senile dementia	1907	1864	Melancholia	45	L. T—	—	1
M. S—	34	Melancholia	1865	1861	Congenital imbecility	44	B. S—	—	1
K. E. B—	58	"	1910	1879	Melancholia	30	A. E. B—	—	1
C. D—	46	Climacteric melancholia	1879	1859	Mania	50	E. T—	—	1
								3	10
Total								.	13
Mother was insane, but never in asylum								.	6
Mother's attack of insanity could not be verified								.	6
Mother committed suicide								.	3
Total								.	28

Prevention should be by segregation rather than by sterilisation, unless the individual preferred liberty and sterilisation to incarceration without mutilation. In the case of women, segregation naturally need not last beyond the climacterium.

Summary of Above.

	Son.	Daughter.	Total.
Father transmits insanity to	7	9	16
Sterilisation would have prevented birth	1	1	2
Mother transmits insanity to	8	13	21
Sterilisation would have prevented birth	0	3	3
Parent transmits insanity to	15	22	37
Sterilisation would have prevented birth	1	4	5
Total cases completed as above		37	
Parent insane, but never in asylum		17	
Parental attack of insanity could not be verified		26	
Parent committed suicide		6	
Total		86	

Lastly, it is irrational to deal with the insane and leave other degenerates undealt with. To deal with the insane and leave habitual criminals, imbeciles, epileptics and other degenerates to perpetuate their failings would be as rational as to amputate a toe when the whole leg is gangrenous. As the toe is a small part of a diseased mass, so the insane are a small part of the degenerate masses; amputation in both cases should be performed above the disease. If, however, amputation is impracticable, then we have to be content with tonic remedies applied to the healthy part of the body; in the case of our nation this tonic method is exemplified by any treatise on eugenics.

Incidentally I would call attention to the mental diseases, as inherited in the five preventable cases I was able to trace. (1) From father to son, mania to dementic præcox; (2) from father to daughter, recurrent mania to recurrent mania; (3) from mother to daughter, mania to dementia præcox; (4) from mother to daughter, recurrent mania to climacteric melancholia; (5) from mother to daughter, melancholia to melancholia.

When one remembers the preponderance of cases of melancholia admitted to an asylum, the fact that four out of the five parental attacks were entered as mania and two as recurrent mania speaks for itself.

Amenorrhœal Insanity.⁽¹⁾ Abstract of a paper read by C. T. EWART, M.D., Senior Assistant Medical Officer, London County Asylum, Claybury, at a joint meeting of the Obstetrical and Gynæcological Section of the Royal Society of Medicine with the Medico-Psychological Association, November 21st, 1911.

THE youngest child of a family is biologically the eldest, and this factor causes diseases to alter their type.

Menstruation is a rhythmical periodic function.

Amenorrhœa produced by the internal secretion of the ovaries.

In insanity, is suspended menstruation "cause" or "effect"?

Diagnostic point in amenorrhœal insanity is, that within three months of re-establishment, the patient is fit to be discharged.

Amenorrhœa related to heredity and environment which are co-lateral but not co-equal.

Amenorrhœa in relation to environment, the main factor of "recovery."

Insanity in relation to amenorrhœa as to prognosis and recovery. (Statistics and cases quoted.)

DISCUSSION.

DR. ROBERT JONES said Dr. Ewart had taken the cases with which alienists were conversant, and he, Dr. Jones, thought he could supplement some of the remarks in that paper. He was glad to think that the discussion was the outcome of the most suggestive paper which was read by Dr. Griffith at Claybury when he inaugurated, at Woodford, a branch of the British Medical Association. This paper now contributed dealt, in his opinion, with the most fundamental point relating to the race, as well as concerning the individual, *i.e.*, the reproductive functions. The paper was full of suggestions; there was also much philosophy in it, though he feared Dr. Ewart had shown himself to be too much of a pessimist with regard to recoveries in asylums. The reproductive function was the highest function of the individual in regard to the race; that was generally agreed to. Darwin wrote about animals in captivity, and showed that animals in the Zoological Gardens suffered first and most in their reproductive system. Birds live much longer in captivity than in the open air. The animals in the Zoological Gardens were vigorous and healthy, they did not suffer from diseased organs, but all had failures in the reproductive system; presumably, therefore, the nervous system was at fault. It was well known that the advent of menstruation was attended by very distinct and definite psychical conditions, and Dr. Ewart had suggested what might be the explanation of that, namely, an internal chemistry. There must be some change. The internal secretions and their affects as *hormones* were to-day a great subject of study, and he submitted to the Obstetrical Section the suggestion that those chemical constituents collected in the blood and acted upon what Dr. Ewart said was the fundamental point in his paper, namely, a faulty or a vicious inheritance. The author of the paper found that heredity was responsible for 88 *per cent.*

of these cases. Just before this combined meeting a discussion was held by the Medico-Psychological Association dealing with heredity in ordinary insanity, in which it was shown that heredity played a part in certainly 50 *per cent.* of all the cases. It was well known that animals had a special season for propagating their species; that was known also in regard to fishes and birds; man was the only exception. In the human female two points came up clearly: (1) periodicity, and (2) liability to be affected by what Dr. Ewart termed "environment." It was an interesting fact that some of the nurses who joined the staff at Claybury Asylum, a large number perhaps he might state of the younger ones, coming from the country had suppression of their menses after joining, and for a more or less considerable time afterwards. Food could alter the chemical constitution of the cells. Why did binary fission take place in protozoa? Why did germination occur? There seemed to be some hidden and not yet understood chemical condition to account for such phenomena. It was well known also that environment would affect plants. The normal growth of them—leaves, branches, flowers—could be so altered as to put off the growth of flowers indefinitely. So the flowers were not, as they should be, the proper culmination; environment had to be reckoned with. As long ago as 1824 Jenner pointed out, in the *Philosophical Transactions*, that at the period of the migration of birds their ovaries increased in size and became more "fleshy." Others had described atrophy in those of the cuckoo in the month of July, that again suggesting chemical changes or internal conditions. Others, again, said that migration was due to a certain definite relation between darkness of day and the amount of food. There were thus two conditions—an internal or chemical cause, and an external or environmental. He considered that the asylum was the very best place in which to study those very refined and subtle changes in mental conditions in consequence of peripheral stimulation, for there one found the neurasthenic and the psychasthenic, who were most wonderful weather-glasses; such a person was a splendid galvanometer of what occurred from the outside as well as from within. It was known that the exhausted neuron was the most responsive—of course unhealthily responsive—to stimuli. For that reason it seems quite appropriate that Dr. Ewart's paper should be considered by a joint meeting of a mental and an obstetrical society. The subject was a very complex one, and he would welcome any light which might be shed upon it by the obstetrician. He knew that anæmic girls entered Claybury suffering from amenorrhœa, and that when the menses had become re-established mental recovery took place. He could make that definite statement. How did they recover? They had Turkish baths and measures of that kind with the idea of eliminating toxins. One of his patients, a fairly young woman, attributed her recovery mainly to the use of the Turkish baths. Physical drill was also given, and that was very important. They also had for the anæmia what was much more important than phosphorus to the brain, namely iron. He knew persons who, having been previously healthy, when menstruation was suppressed immediately had an outbreak of mental disease. The period of cessation of menstruation was another very subtle time, and obstetricians quite well knew that women required very careful and gentle handling to carry them safely over the shoals of the climacteric. He had known people who had consulted him outside as to their physical and mental condition about the period of the climacteric, and who had eventually found themselves under "care" mentally. But, although menstruation might cease and the amenorrhœa might precede insanity, the question arose, was one justified in assuming that there was in these a definite relationship of cause and effect? He asked whether it might not be that the insanity was a correlative of the amenorrhœa, and that both were due either to emotional disturbance, or something akin to it such as a toxin bringing about some constitutional vice? He would like some light thrown upon that in the discussion. His own view was that there was such a condition as insanity, although not of a definite type, occurring in consequence of amenorrhœa. Most often in young girls who came into asylums the menses reappeared simultaneously with the recovery from their mental symptoms. Occasionally, however, recovery from insanity was not followed by the re-establishment of the menses. The converse was also true: recovery from insanity may not always follow the reappearance of the menses. He regarded the comparative study of this subject as a very important matter. Much wild talk was indulged in about the effect of the woman's condition on the man. Not long ago he

met a man who had neuralgic symptoms during his wife's pregnancy, which symptoms were only relieved at the time of the birth of the child. Sellheim described the undulating line of movement which was characteristic of ordinary normal menstruation, and it seemed clear that the metabolism of the body and the metabolic changes, including an increase in the thyroid, changes in the parotid glands and even in the skin, occurred in sympathy with menstruation. First of all there was an increase in the nitrogen products, and he believed that the output was gradually increased up to the full development of the uterine mucosa. Dr. Westermarck, in his interesting book, went into the history of primitive man concerning the question of the establishment of menstruation, and he found to his satisfaction—and he, Dr. Jones, thought others who had done much reading would agree with him—that originally man was a monœstrous creature; but now man—the genus—was diœstrous; most births were found to take place about February and September, indicating that the Christmas marriages—a great season among the poor, and the festivals of the May Queen, which latter were survivals of the spring festivals of ancient times, were periods of saturnalia, festivals of sexual license, and were confirmatory of the survivals of interesting physiological events in the individual from the anthropological point of view. In ordinary women it was well known that the period of menstruation was one of not inconsiderable strain, undue sensitiveness and nervous malaise. He had numerous cases at Claybury Asylum, in whom the period of menstruation was known definitely by the occurrence of epileptic seizures, by irritability, and even by delirium; the manifestation might even amount to acute mania every month. The first occurrence of the menses had a distinct mental cycle of its own at puberty, and he was very glad to feel that there were present men who could speak, as the Chairman could, with great authority on the subject. Those who had to treat mental diseases would be much helped by any information and instruction which the debate might bring forth, as their knowledge in asylums must of necessity be limited, for their mental patients were unwilling inmates. They resented detention, and any attempt at vaginal examination, unless there was obvious necessity, was greatly objected to; indeed it might be viewed as a serious assault and become the basis of suspicions and delusional states which would tend greatly to retard mental recovery. The lesson from Dr. Ewart's valuable paper was that all states of weakness, all circumstances which tended to over-excite the nervous system, and all conditions tending to lower normal inhibition were converging factors in a suitable soil, *i.e.*, in those with inherited tendencies to mental breakdown, and towards the production of insanity. He ventured to congratulate the Society on having such an interesting paper to open the discussion.

Dr. H. MACNAUGHTON-JONES said he ventured to take part in the discussion, appreciating as he did the enormous importance to the woman of the whole question involved in the occurrence of amenorrhœa. He had for a number of years taken a considerable interest in the psychological relationships of the internal genitalia to the affections of women. Possibly that might be because some of his earliest associations were centred round a large lunatic asylum with which, in his younger days, he was connected. In the year 1893 the Gynæcological Society devoted two whole evenings to the subject, and he introduced the discussion. Later on—namely, at the Ipswich meeting of the British Medical Association in 1900—when the subject of the relationship of crime and insanity to sexual troubles in women was brought forward, he again opened the discussion. That was why he ventured to say a word at the present meeting. He proposed to confine his remarks to the question whether there was sufficient justification to separate out, as a type and class, a form of insanity to which the term “amenorrhœal” might accurately be applied. The profession was to-day in a better position to approach the discussion of the subject as compared with a few years ago, because terms could now be more accurately applied to such mental conditions in women as neurasthenia, psychasthenia, hysteria, melancholia, hypochondria, which were more clearly differentiated. Side by side with more accurate grouping of the particular symptoms associated with each of those conditions there was, as had already been said, a far more accurate knowledge of the whole subject of menstruation, ovulation, the relation of ovulation to metabolism, both that of the ovary itself and of the body generally, and more particularly to the uterine functions, both in the pregnant and the non-pregnant states. And in recent years

both homoplastic and heteroplastic transplantations of the ovary had proved beyond all doubt the enormous importance of the ovarian secretion. In addition, owing to our better knowledge of the development of the corpus luteum and the part it played in menstruation and pregnancy, and the whole influence of the lutein secretion, which was administered in certain mental conditions associated with menstruation, the profession was now in a different position in regard to the knowledge of the psychical effects of the ovarian secretion. But he would like strictly to limit himself to the very important point as to whether there was justification for speaking of "amenorrhœal insanity." He held that there was nothing more dangerous than to introduce a term which had not a strictly accurate and scientific basis to justify it. In the medical profession, unfortunately, terms were applied in order to justify certain practices and grounds of practice; and he could conceive of nothing more dangerous than to get into men's head that a woman suffering from amenorrhœa, whether primary or secondary, who happened to show some curious psychasthenic or neurasthenic symptoms, was necessarily to be classed as an amenorrhœal lunatic. From anything which had been said that afternoon it seemed to him that nearly all the causes which led to amenorrhœa were those which also led to insanity—heredity, anæmia, chlorosis, environment, trauma, shock, mental disappointment. He thought that would be the common experience of many present. A woman whose menstruation had been regular became melancholic, and the menses ceased. The menses had nothing to say, in that instance, to the melancholia. Some few years ago there were statistics published which were taken from several large asylums, and it was shown that among those suffering from dementia, delusional insanity, melancholia, epileptic mania, the number who had simple amenorrhœa was very small. He made this statement with some hesitation in the presence of his psychological listeners. Before accepting such a term as "amenorrhœal insanity" he thought there should be more solid grounds than there appeared to be at present. He had always understood that the organ most affected in insane people was the heart; certainly in a large proportion of cases of insanity the heart was found to be affected. But one would not, on that account, speak of cardiac insanity. No one felt more strongly than he did about the enormous importance of the sexual activities in women and the whole influence of the genitalia on them, both mentally and physically. It was the strongest link in the chain of a woman's life, and if it were weakened, that weakening would at once affect her whole physical and mental condition. But, while admitting that, he would submit that it was a more or less dangerous innovation to accept a term which did not at present seem to be scientifically justified.

Dr. PERCY SMITH said he was very glad to hear Dr. Macnaughton-Jones' remarks. He remembered and took part in, many years ago, the discussion on the relationship of diseases of the pelvic organs in women to insanity. He also recollected the discussion at Ipswich, as he was President of the Section. He quite agreed with Dr. Macnaughton-Jones that it was a dangerous thing to apply such a term as amenorrhœal insanity. When he saw the title of Dr. Ewart's paper, he thought it was a hark back to a classification of insanity which had been, to a large extent, abandoned. But he hoped to hear in the paper some description of what the author meant by amenorrhœal insanity; yet he regretted to say he did not gather the information he desired in that matter. The author did not describe any form of insanity which had a special association with amenorrhœa. He would have liked to hear a larger amount of material from Claybury Asylum used; for instance, how many cases in the last two years had been admitted with amenorrhœa as a part of their insanity, and what was the special group of symptoms associated with that amenorrhœa. But the author said, and all would agree with that, that there might be amenorrhœa with both melancholia and mania. There was often insanity associated with amenorrhœa, but, in his opinion, there was no special amenorrhœal insanity. It must be remembered that amenorrhœa was an extremely common symptom in all the acute insanities of women. One met with it in cases of melancholia, in acute mania, in puerperal cases and so on. It was very rare in association with the more chronic insanities, the cases of delusional insanity, or early dementia, or chronic dementia. But one did not meet with amenorrhœa as a necessary symptom. It was exceedingly common in young women who were attacked with what might at first appear to be neurasthenia or

psychasthenia, but which developed into definite melancholia. It seemed to him that if there were any form of insanity to which the term amenorrhœal insanity should be applied, it was in the type of case occurring in young women in whom, commonly, there was a history of prolonged fatigue or stress. For instance, one saw it in shop assistants, telegraphists, telephonists, and others following monotonous occupations for long hours, perhaps with insufficient nourishment, and who, in consequence, became anæmic and worn out, who lost flesh and became run down, sleepless and depressed. Generally it appeared that the amenorrhœa was not the primary condition followed by melancholia, nor was it that melancholia was the primary condition followed by amenorrhœa, but that both had come on concurrently. It was a common observation that the patient recovered when the menstruation was re-established. In many of those cases there was amenorrhœa for six or more months. During that time, in the course of treatment, flesh was put on, sleep was being restored, and the mental state was becoming more normal, though the patient was evidently not yet quite well, and then menstruation recurred as the last evidence of the recovery of the general physical health, after that date the patient again reached her former level of mental health. Dr. Ewart said that the diagnostic point in favour of amenorrhœal insanity was that within three months of the re-establishment of the menses the patient was fit to be discharged. That seemed to say it was difficult to diagnose amenorrhœal insanity until the patient had recovered. But it was desirable, if possible, to diagnose it early in the attack. It was a good rule that a patient who had had an attack of mental disorder, of whatever nature, and who had recovered to the point that menstruation had returned, and had had two menstrual periods consecutively without any relapse of the mental symptoms, should be regarded as recovered. With regard to the question of treatment, there was one thing which one felt absolutely certain about, namely, that such cases did not need any local treatment. The question was always raised by the relatives of the patient somewhat as follows: This girl has had amenorrhœa for six months: she has been under care for mental disorder, and she seems well on the way to recovery, but her menses have not returned; is there not some local disease? Should not something be done locally? His answer to that was, unless one felt that there were definite indications of local pelvic disease, that no case of that sort should be examined. The author had well said that the attention of the patient should not be concentrated on the pelvic functions in these cases. Thus the treatment resolved itself almost entirely into one directed to improvement in the general health. Dr. Jones very properly referred to the fact that iron was found to be the sheet anchor for the anæmia, and he, Dr. Smith, felt that most of the cases, if they were going to recover menstruation, would do so without any local treatment. But should there be evidence of pelvic disease, it should, of course, be treated in just the same way as similar disease would be dealt with outside the asylum. He felt, however, that there was no royal road to the cure of amenorrhœa in insanity by any special form of treatment.

Dr. RUSSELL (Glasgow) assured the meeting he had not come prepared to speak, but as a provincial member he would accept the Chairman's invitation to say a word on a point or two which occurred to him while listening to the paper and the speeches which followed. He ranged himself on the side of those who criticised the term. He believed the knowledge available did not yet justify the term "amenorrhœal insanity." But the paper which had been read, even if it did not justify the use of that term, made out a strong case for the study of the subject from the present point of view. His experience had been that when the subjects of amenorrhœa had shown nervous disturbance, the stoppage of the menses had been the effect rather than the cause. He could remember cases where there certainly seemed to be a danger of profound mental disturbance and where the removal of the ovaries cut short the symptoms which threatened insanity. He could think also of a case he was interested in, particulars of which he published in Glasgow, which had a profound interest from the point of view of mental disorder. It was a case in which an asylum attendant on duty in an epileptic ward developed epilepsy. Very naturally she was considered as having probably acquired it from the associations of her work. But two or three years later she was found to have developed a large growth in one of her ovaries which doubtless was responsible for the commencement and the persistence of her epileptic attacks. The removal of this large tumour and of the other ovary, which was also found to be

similarly affected, was at any rate followed by the complete cessation of the attacks. They had found difficulty in getting a satisfactory discussion of this subject in the Glasgow Society, evidently because knowledge was not yet sufficiently definite. He, Dr. Russell, believed the condition under discussion bore a marked relation to some toxic condition. One was aware of the influence of toxins on the nervous system. Sometimes the toxæmia was due to food, and he felt that some of the cases of actual insanity in young women were due to a persistent neglect of the proper principles of feeding, and the omission of seeing to a regular relief of the bowels. When admitted into an asylum they were put upon proper treatment, hygienic and other, and the normal and proper functions of the body were soon re-established.

The PRESIDENT said he did not propose to deal with the subject at any length, the more so because he was sorry—from the point of view of a lively discussion—to say that he found himself in almost complete accord with nearly all the previous speakers. He did not believe there was such a condition as amenorrhœal insanity, if by that was meant a special form of insanity produced by amenorrhœa. It was known that amenorrhœa was one of the commonest symptoms in all forms of acute insanity, but the form in which it was commonest was probably melancholia, and he thought that could be explained to some extent on the same basis as many other physical symptoms which accompanied that disease. Melancholiacs, for instance, were particularly subject to disorders of digestion, to anæmia, to cardiac irregularities, and the condition was also sometimes associated with affections of the kidneys; and probably Dr. Maurice Craig would say those symptoms were due to the heightened blood-pressure and the contracted arterioles which are found in such patients. Dr. Ewart, in describing what he called amenorrhœal insanity, mentioned very few pathognomonic indications; indeed the only one he gave was that the cases got well rapidly, and he cited twelve cases of apparent amenorrhœal insanity, which he afterwards said could not really have been instances of that condition, because they did not get well. That indication could scarcely be accepted. Amenorrhœa might precede the occurrence of insanity, or might follow it; also the menses might return before the insanity was recovered from, or *vice versa*. That seemed to make it clear that amenorrhœa in insanity was merely a concurrence or syndrome, and not causal in any way. He quite agreed that the menstrual period affected the mental condition of the patient, but it did so just as it affected the mental condition of many sane women. He regarded the real basis of the whole condition as anæmia. Dr. Robert Jones had said that the typical cases of the kind which came into Claybury Asylum were young anæmic girls. It was well known that such girls were very liable to various nerve symptoms, and if, in addition, they had a bad heredity, a neuropathic diathesis, it was not surprising that mental breakdowns were common among them. He believed they must hold that the existence of amenorrhœal insanity as a definite morbid entity was, in the words of their Scotch friends, "not proven."

Dr. W. S. A. GRIFFITH said the question now being discussed arose out of a paper which he read in another place, and he made the suggestion that it would be better to debate it in such an assembly as this. He had not yet learnt exactly what Dr. Ewart meant by amenorrhœal insanity. Indeed, he did not think it was yet very clear what was meant by amenorrhœa. Possibly there was some misapprehension in regard to this. The discharge which occurred monthly was a mere phenomenon in menstruation, and he gathered that the meeting was discussing the absence of this, which might be a different matter from the absence of menstruation, just as the retention of the menses was different from the entire absence of the menstrual process, which occupies half the month in its inception, completion, and retrograde stages. He thought it would have been better if Dr. Ewart had said exactly what he meant by amenorrhœa. Were they discussing the mere absence of the visible discharge which, in the healthy woman, consisted of two chief constituents—mucus in abundance and a variable quantity of blood? It was known quite well that in some cases of so-called amenorrhœa it was the blood only which was absent. He suggested these points so that on a future occasion it might perhaps be possible to discuss the subject with more precision than seemed possible that day. The meeting would feel greatly indebted to Dr. Ewart for having brought the subject forward. With regard to treatment, Dr. Ewart asked him in what way he would treat amenorrhœa, because in a certain number of cases

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if menstruation could be re-established normally the patient stood a better chance of mental recovery. This was a difficult question to answer. No girl who was anæmic ever got well without her bowels being cleared out. This was so important that he put it in the first place. There were many cases of copræmia, or toxæmia, following the absence of this precaution. The administration of iron without clearing the bowels often made the patient worse. After attention to the bowels he placed food, fresh air, and iron as about equally valuable. It must be remembered that the function of menstruation depended on the ovaries, for if healthy ovaries were removed from a healthy woman she would never menstruate again, though she might bleed; this, however, was a different thing. The ovaries governed menstruation, and if a healthy girl did not menstruate for years there was something behind it which neither iron, nor purgatives, nor fresh air, nor exercise, would remedy. What that something was, was not yet known.

Dr. HAYDN BROWN desired to make a few remarks on account of having heard a certain observation made in Dr. Ewart's paper, *viz.*, that anything which served to take the attention of the patient away from the region of the pudenda was of value. Stimulated also by the remarks which he had heard in the discussion, he desired to mention a treatment which was only too little known, but was of vast importance, not only to gynecologists and psychologists, but to every earnest member of the profession, namely psycho-therapy. This was not only valuable as a treatment, but it shed a flood of light on the nature of the very conditions now under consideration. He had had unusual opportunities of studying the effects of psycho-therapy in borderland cases, and in connection with the functional conditions associated with menstruation, and he found psycho-therapy acted like a charm in all functional cases. It was important not only in amenorrhœa but in dysmenorrhœa and menorrhagia, and in mental conditions associated with the menopause. A good deal had been said about general ill-health in these conditions. It happened that in treating insanity on the one hand, or disorders of the menstrual period on the other, the physician was at the same time attending to the general health; and constipation, anæmia, and dyspepsia themselves yielded to psycho-therapy when it was employed in a proper manner. The question was one to which the profession would need to pay more regard in the future.

Dr. STODDART desired to associate himself with the speakers who denied that there was such a disease as amenorrhœal insanity, believing that the amenorrhœa was simply a concomitant symptom. But he would not like absolutely to close the door on the matter without quoting one case which occurred to him, and seemed to show that there might be such a disease, though no doubt it happened very rarely. The case he referred to was that of a young lady who was previously in perfect health and had a faultless heredity. In the summer time she bathed in the sea, and there seemed to be a definite association between the subsequent amenorrhœa and the form of insanity which developed afterwards. The menstruation ceased from the moment of the bathing, and when he saw her three years later she had not menstruated since. In association with the amenorrhœa she developed a form of insanity, which came into line with dementia præcox; there was the silly laughter followed by dementia. He had not seen her for eighteen months, but he believed she had never menstruated since. Therefore it seemed possible that this might be a case of insanity dependent upon amenorrhœa. The remarks of Dr. Haydn Brown suggested to him another case for mention in the discussion. It was that of a lady who likewise had not menstruated for three years, and had developed ordinary melancholia. She was unable to continue her work, was depressed, lost interest in life, and came into Bethlem Hospital. She was there now. Within a week he started psycho-analysis. After the second hour he began to penetrate her subconsciousness, and a marvellous result apparently occurred, for she menstruated that night. The menstruation took its normal course, and mental improvement began from that time. So one had to recognise that amenorrhœa might cause mental disorder; and, on the other hand, that mentality had a definite effect upon menstruation.

Dr. AMAND ROUTH (the President of the Obstetric Section), after congratulating the Joint Section on the excellent discussion, said he agreed with previous speakers that insanity had not been proved to be often due to the amenorrhœa in cases where the two were associated. Recent researches, however, into the bio-

chemical causation of amenorrhœa, and into the possible causation of insanity by auto-toxæmia, made the temptation great to assume that these conditions might sometimes be ætiologically associated. Menstruation is almost certainly due to the gradual cyclical accumulation in the blood of certain chemical bodies, which are, perhaps, derived from the internal secretion of the ovaries and of the other ductless glands (adrenals, thyroid, pituitary). Dr. Blair Bell has done much excellent work, tending to show that some proportion of these chemical bodies consists of salts of calcium. Dr. Bell also believes that the uterus is homologous to the calcium chamber of birds, and that it actually excretes large quantities of these lime salts during the first part of the menstrual discharge, which is then largely made up of leucocytes, with the result that there is a marked and immediate lowering of the calcium blood-content. It is evident, therefore, that amenorrhœa might lead to a double auto-toxæmia, due, on the one hand, to an altered or diminished internal secretion of the ductless glands, including the absence of the primary products of lutein formation, and on the other hand, to retention of the substances normally excreted by the uterine glands at menstruation. Pathological chemists had not yet discovered what these toxic substances are, and it has not yet been scientifically proved that they cause insanity. This suggestive paper will lead to careful study of the subject.

Dr. EWART, in replying, said that the period allotted being too short, he had been compelled to considerably abbreviate his paper, and he was afraid an impression of disconnectedness would be conveyed, but he trusted a certain amount of coherence would be seen when the article appeared in print. As to the term "amenorrhœal insanity" he was merely contending that all those who accepted puerperal insanity as a nosological entity, would be justified in placing amenorrhœal insanity in a similar position. The cause of each was possibly some form of auto-intoxication, and the symptoms were practically akin; although both types presented the appearance of physical wreckage, there was no especial anæmia. The mental symptoms were those of acute mania or melancholia of various lights and shades, but before such an audience it would have been merely occupying time endeavouring to paint a picture of conditions about which they were experts, especially as many would probably not agree as to the terms used in defining the tints. As to the inability to diagnose a case of amenorrhœal insanity until after improvement—not recovery—has occurred, the same difficulty occurs in those cases called "dementia præcox," a term which should, in his opinion, include only a particular type of primary dementia which shows a progressive downward course and from which there is no recovery. He had seen many cases diagnosed as dementia præcox recover, but in the early stages, who can truly say, *this* case will recover, and *that* will not. It may be either a case of dementia præcox from which there is no recovery, or a case of adolescent insanity, from which many recover. Who can tell? He confessed that until improvement had commenced, he could not. The non-ability to digest milk is frequently hereditary, and this must mean not only some alteration in the constitution of the gastric juice, but possibly, also, a change in the glands themselves; in like manner shell-fish acted virulently on certain persons—in fact, what was a food to some became a poison to others. A mental alcoholic inherits a peculiar susceptibility to the poison of alcohol, and a mental amenorrhœic, to some toxin derived from the generative organs. These are the appropriate stimuli. Both individuals are potential lunatics, but had no alcohol been taken in the one case, and had menstruation not ceased in the other, neither would have become insane; therefore, as he saw it, the terms "alcoholic insanity" and "amenorrhœal insanity" are, from the ætiological point of view, perfectly justifiable. If there is any good reason for suspecting the development of a peculiar toxin in heart disease, why should there not be a cardiac insanity? His outlook on menstruation has been from the standpoint that the discharge of blood was an outward and visible sign of some inward condition connected with reproduction. He would not detain them any longer, as time was not sitting with folded wings, so he begged to thank the President and those present for their courteous patience.

¹ This paper is published in the *Transactions of the Royal Society of Medicine*.

Further Investigation on the Cerebro-Spinal Fluid in Insanities. By G. SCOTT WILLIAMSON, L.R.C.P., and J. R. P. PHILLIPS, M.R.C.S., Assistant Medical Officer, City and County Asylum, Fishponds, Bristol. (From the Pathological Laboratory of the Bristol General Hospital.)

PART I.

By G. SCOTT WILLIAMSON.

THE investigations recorded in the following paper were undertaken to determine the reason for the discrepancy in the results when applying the Wassermann reaction to the cerebro-spinal fluid and blood-serum of general paralytics. The experiments have yielded results significant in other directions which are of some interest.

The cerebro-spinal fluid yields a positive Wassermann reaction in 97 or 98 *per cent.* of cases, whereas only about 50 *per cent.* of cases give a positive result when the test is applied to the blood-serum.

What hypothetical explanation can be offered to explain this difference?

It may be that there is a purely local infection yielding (a) an immune body in the cerebro-spinal fluid only, or (b) an immune body in great concentration in the cerebro-spinal fluid with only traces in the blood-serum. This is conceivable but hardly probable. The Wassermann technique is, however, a very delicate test for the presence of immune body, and would detect any mere difference in concentration and quantity.

To explain the 50 *per cent.* of positive cases under the first assumption there would require to be some second focus of infection. Moreover, if general paralysis of the insane is an infective process in which the response to a toxic agent is confined to an area without a general participation, it would stand isolated as contrary to all experience in other toxic conditions.

The histo-pathology of general paralysis of the insane has not yet demonstrated any clear distinction between the perivascular changes in the brain and meninges and those in the other organs in that disease. From these considerations it

would seem necessary to seek some other less simple explanation.

Another hypothesis accepts the condition of a general toxæmia and response, and seeks the explanation in the chemical constitution of the cerebro-spinal fluid in general paralysis of the insane.

Paghini and others have emphasised the constant increase in the amount of the cholesterol bodies in the cerebro-spinal fluid of general paralysis of the insane, and further, the phosphatides are very variable quantities in cerebro-spinal fluid. In the blood-serum the lecithins are undoubtedly increased, whereas I have been unable to detect any appreciable increase in the cholesterol content. Muir, Mackenzie and Browning have fully demonstrated the effect of the compounds in mixtures yielding a positive Wassermann, and their influence upon hæmolytic bodies is well known. The exact significance of these considerations is at present under consideration.

During these investigations it became necessary to detect the presence of blood-serum in the cerebro-spinal fluid. For this purpose advantage has been taken of the presence in blood-serum of a ferment capable of splitting a synthetic di-peptide, glycol-tryptophane, into its two components. This ferment is not present in normal secretions, *e.g.*, cerebro-spinal fluid, synovial fluid, etc. It does appear in these fluids under the stimulus of a local irritant.

The following normal cerebro-spinal fluids have been tested, and found free from ferment.

A cerebro-spinal fluid is classified as normal when it yields a uniform amount of protein, ash, nitrogen, and contains a reducing body in from 0.035 to 0.043 *per cent.*, urea in from 0.009 to 0.046 *per cent.*, and does not contain fibrinogen, albumose, or albumen. Sixteen such fluids have been tested from 5 cases of accidental death, 4 cases of cardiac disease, 2 cases of carcinoma of viscera, 2 cases of hysteria, 1 case of Addison's disease, 1 case of sunstroke?, 1 case of chorea.

This would seem sufficient evidence to justify the assumption that cerebro-spinal fluid is not a transudation, but a specific secretion (see Table). Further evidence of this is got from the fact that animals whose blood-serum contains a high concentration of agglutinins in artificial immunity do not yield a cerebro-spinal fluid that agglutinates.

Cerebro-spinal fluid from the following cases gave a positive ferment test, though some of them only differed from the prescribed standard of chemically normal fluids in the slightest degree: 4 cases of tuberculous meningitis, 4 cases of tabes dorsalis, 3 cases of uræmia, 3 cases of malignant endocarditis, 3 cases of septic meningitis, 2 cases of diabetes, 2 cases of typhoid fever, 2 cases of secondary syphilis, 2 cases of hydrocephalus, 1 case of rheumatic fever, 1 case of pneumonia, 1 case of spinal caries, 1 case of optic atrophy, 1 case of fibroma of dura-mater.

Thus there is exudation of serum in these irritative conditions, the lesions being general or local. Uræmia, diabetic coma and pneumonia may be counted as pure toxæmias; rheumatic fever, typhoid fever, etc., as septicæmias; while the case of fibroma of the dura with paralytic symptoms represents a purely local irritation.

In the normal cerebro-spinal fluids exception may be taken to chorea as being an undoubted irritative condition; it must be remembered, however, that chorea, as far as the symptoms go, could be well classified as a pure peripheral nerve lesion. One case cannot, however, furnish matter for argument.

It seems probable, then, that the presence of this ferment in cerebro-spinal fluid means an irritative transudation, though not necessarily inflammatory. The continued presence of this ferment would mean a progressive irritation.

Viewed in this light, the cerebro-spinal fluid from cases of insanity yields some interesting results.

Every cerebro-spinal fluid giving a positive Wassermann reaction contains this ferment without exception.

The most striking result is the overwhelming number of positive ferment tests. Of fifty-two fluids examined only eight gave no evidence of this ferment.

The condition of these patients will be dealt with later; suffice to say at present that they represent cases in which it is absolutely certain there is no progressive irritation present and for the most part are imbeciles. When it is borne in mind that these tests were performed in ignorance of the condition of the patient yielding the fluid, and that out of fifty-two cases these eight were picked out, it goes far to prove that the presence of this ferment is coincident with irritation and the significance of the remaining forty-four cases is considerable.

For if there is a persistent irritant, there is something under-

lying some insanities that can be dealt with either by removing the cause or opposing and counteracting the effect, in other words we must treat and not palliate insanities, and this furnishes yet another inducement to the prosecution of research into the ætiology of insanity.

Another explanation is possible. The irritant may not be persistent, but the effect remains which establishes a vicious circle, the psychic import of which yields a mental explosion that mechanically leads to a hyperæmia with transudation: in other words it is not cause, but effect, with which we have to deal. The only proof of the latter is by exclusion of the former.

English psychologists generally adopt the psychic explanations without proof, and seek (curiously enough) to palliate or cure by a sociology repugnant to all but the most advanced materialists. Therein the paradox seems complete.

Appendix.—*The Glycol-Tryptophane Test.*

Solution required.—1. Glycol-tryptophane, sold as “Ferment Diagnostium” by Kalle, of Biebrich.

2. A solution of bromine water, 3 parts; glacial acetic 10 *per cent.*, 5 parts.

3. Toluol.

Five to 10 c.c. cerebro-spinal fluid measured into a test-tube, and 1 c.c. glycol-tryptophane solution added and covered with toluol. Incubate for twenty-four hours at 37° C.

Take out a sample, and add the bromine water drop by drop until a rose-pink or lilac colour appears, disappearing on further adding bromine water.

The appearance of a lilac or rose-pink colour indicates free tryptophane and a positive reaction.

Note.—This communication is merely a preliminary report upon work in progress, and any deduction drawn from the facts must be of a purely tentative nature, or, at least, in no wise dogmatic.

PART II.

By J. R. P. PHILLIPS.

THE prime object in examining a short series of cerebro-spinal fluids was to arrive, if possible, at an independent opinion of the Noguchi reaction as a simple bedside means of recognising the changes in the cerebro-spinal fluid due to syphilis, and to compare it with the Wassermann test. A satisfactory conclusion has resulted, and we appear to have lit upon some suggestive incidents by the way. First, reference will be made to the technique and methods of procedure before giving results and subsequently showing a few cases. In making the necessary lumbar punctures, after taking the usual antiseptic precautions, $\frac{1}{2}$ c.c. of eudrenine was injected beneath the skin into the subcutaneous tissues and allowed to act for four minutes.

The escaping fluid was caught in a sterilised bottle, and after Noguchi's test had been done, and the result recorded, the bottle was labelled with a number only, and sent to the laboratory. No comparison of results was made until after forty fluids were independently examined, and none again until after the examination of the remaining number. Fluid has been examined from nearly every male general paralytic or suspected general paralytic up to a recent date, a patient in this asylum—20 cases; in 14 of these the immediate Noguchi test, the laboratory test and Wassermann's reaction all gave corresponding results. Of 3 suspected cases, one will be shown directly, one is dead, and showed no *post-mortem* changes suggestive of general paralysis, and the third has unfortunately been transferred to another asylum. The three cases were all negative to all three tests, and so helped to eliminate general paralysis. A fourth case, a suspected general paralytic, which is also shown, was, at two separate punctures, negative to both the Noguchi's, on the first occasion gave a positive Wassermann and on the second a negative Wassermann.

So far the laboratory results and the immediate examinations are in absolute accord, and the Noguchi and Wassermann reactions are also in accord with one exception.

There remain two cases, one clinically and *post-mortem* a typical general paralytic, and the second also clinically appa-

rently a strongly marked general paralytic; these were both positive Noguchi's at the bedside and negative to both laboratory tests. The latter case, however, is attributed possibly to the fluid having become accidentally contaminated by bacteria in transit.

In 95 *per cent.*, then, of cases the Noguchi reaction seems to have shown itself a perfectly reliable, simple, clinical test, and in absolute accord with the laboratory Wassermann technique.

The bulk of the remaining cases were taken haphazard for purposes of comparison. As to the ferment reaction, this gave a positive result in all general paralytics, alcoholics, and numerous others in which the clinical symptoms were acute or progressive, but in the majority of cases in which the symptoms were non-progressive there was a negative result.

In two cases, however, it gave a positive result, although the patients had settled down quietly for years with no apparent increase of dementia. Amongst the whole series a type has been met with apparently having characteristics of its own in relation to lumbar puncture. These are the youthful congenital imbeciles. There are four of these in the series. They all bore the puncture perfectly well, expressing neither fear, reluctance, nor pain. They were all attacked within a few hours by more or less persistent vomiting, a varying degree of frontal headache, vertigo on attempting to rise, and slight malaise. There was no apparent change in their mental state. These were imbeciles of a mild type and fairly intelligent. Their symptoms, as shown by their charts, were unaccompanied by any fever, so that one may exclude sepsis. There was a brief rise in the course of one chart, which is, however, attributable to an intermittent condition. They were, with one exception, in bed for some days, and though repeated attempts to get them up were made, the vomiting, whilst not occurring in the horizontal, returned on assuming the vertical position. The quantity of fluid withdrawn in all cases never exceeded 50 c.c., and would not average 20 c.c. In searching for a possible cause of these symptoms it is possible that the explanation is some interference with the semicircular canals, and that the only way in which these might be so affected appears to be through a patent ductus endo-lymphaticus. This duct communicates, on the one hand, with the membranous labyrinth of the internal ear, and, on the other hand, is said to end blindly in the posterior surface

of the petrous portion of the temporal bone in the substance of the dura mater.

The ordinary text-books on anatomy make very little reference to this structure, and Dr. E. Fawcett, Professor of Anatomy, Bristol University, states that so far as is known from reference to text-books such is the case. It has been suggested that the

TABLE I.—*Including all those Cases in which the Wassermann Test gave a Positive Reaction.*

No.	Diagnosis.	Duration.	Excited.	Neguchi.	Wassermann.	Peptase.	Chemistry.	Post-mortem.	Remarks.
1	General paralysis	10 mths.	—	+	++	+	ab.	—	—
2	Ditto	1 year	+	++	++	+	—	—	—
5	"	"	+	+	+	+	—	General paralysis	—
6	"	"	—	+	+	+	—	Ditto	—
11	"	2 years	—	+	+	+	—	—	—
12	"	"	—	+	+	+	—	—	—
14	"	3½ years	—	+	+	+	—	—	—
21	"	2½ years	—	+	+	+	—	—	—
28	"	9 mths.	+	+	+	+	—	—	—
29	"	2½ years	—	+	+	+	—	General paralysis	Female.
32	Secondary dementia	11 years	—	+	+	+	—	—	Has a perforated palate.
34	General paralysis	9 mths.	+	+	+	+	—	—	—
37	Ditto	1½ years	—	+	+	+	—	General paralysis	Double optic atrophy.
20	"	9 mths.	—	—	+	+	—	—	Varying results with Wassermann on separate occasions.
9	"	"	—	+	++	+	—	—	—
47	Congenital imbecility	From birth	—	+	+	+	—	—	A moral imbecile with fair physical development.

symptoms may be due to occlusion, complete or partial, of the foramen of Majendie preventing the escape of the cerebro-spinal fluid from the ventricles into the subdural space, and so giving rise on withdrawal of fluid from the latter to a certain amount of pressure and irritation, either on the floor of the fourth ventricle or on the cerebellum, or both.

It would be difficult in the latter case to suppose:

(1) How the withdrawal of so small an amount could cause an irritation lasting over so long a period.

(2) Why, with the patient in the recumbent position, no vomiting or vertigo occurs?

(3) Why, if due to an irritation of the vomiting centre

TABLE II.—*Including Cases giving a Positive Peptase and a Negative Wassermann Reaction.*

No.	Diagnosis.	Duration.	Excited.	Noguchi.	Wassermann.	Peptase.	Chemistry.	Post mortem.	Remarks.
3	Secondary dementia	19 years	—	—	—	+	—	—	—
4	Mania	7 years	+	—	—	+	—	—	—
7	"	10 months	+	—	—	+	ab.	—	—
8	Alcoholic	7 months	+	—	—	—	—	—	—
13	Melancholia	12 years	—	—	—	+	ab.	—	—
15	General paralysis	1 $\frac{9}{13}$ years	+	—	—	+	ab.	General paralysis	Bedside Noguchi + laboratory Noguchi —
17	Mania	2 months	+	—	—	+	—	—	—
18	Progressive dementia	4 $\frac{1}{13}$ years	—	—	—	+	—	—	At first a suspected general paralysis.
19	Melancholia	5 months	+	—	—	+	—	—	—
22	"	3 months	+	—	—	+	—	—	—
23	Stupor	7 months	+	—	—	+	—	—	—
24	Mania	9 years	+	—	—	+	—	—	—
25	"	1 $\frac{1}{13}$ years	+	—	—	+	ab.	—	—
27	General paralysis?	5 months	+	—	—	+	—	—	Transferred to another asylum.
30	Stupor	1 $\frac{1}{13}$ years	+	—	—	+	—	—	—
31	Melancholia	11 months	+	—	—	+	—	—	—
33	"	1 $\frac{1}{13}$ years	+	—	—	+	—	—	—
35	Alcoholic	4 $\frac{2}{13}$ years	—	—	—	+	—	—	—
36	Dementia	14 years	+	—	—	+	—	—	—
39	Congenital imbecility	from birth	+	—	—	+	—	—	—
40	Alcoholic	2 $\frac{1}{13}$ years	+	—	—	+	—	—	—
41	Epileptic	13 years	+	?	—	+	ab.	—	Bedside Noguchi negative.
42	"	12 years	+	?	—	+	—	—	Ditto.
46	"	14 years	+	?	—	+	—	—	—
52	General paralysis	6 months	+	—	—	+	—	—	Bedside "Noguchi positive.

in the medulla caused by an increased pressure tension, other centres in the same region are not equally affected?

All points being considered, then, it appears probable that a patent ductus endo-lymphaticus occurs in these cases. If this is an abnormality, and the text-books supply little for or

against such assumption, it is in keeping with other congenital aberrations associated with such cases, *e.g.*, patent ductus arteriosus, etc.

In the annexed tables the figure in the first column is merely for reference to case-books. In the fourth column, headed "excited," a + sign indicates active excitement, either maniacal or melancholic, at the time the cerebro-spinal fluid was obtained, a — sign the absence of such excitement.

In the columns headed "Noguchi," "Wassermann" and "peptase" + equals a positive, — a negative reaction; where two signs are placed opposite the same number, as ++, it indicates a very strong reaction. In Case No. 20, Table I, the cerebro-spinal fluid was tested at an interval from two separate punctures.

TABLE III.—*Including those Cases giving a Negative Reaction to both Wassermann and Peptase Tests.*

No.	Diagnosis.	Duration.	Excited.	Noguchi.	Wassermann.	Peptase.	Chemistry.	Post-mortem.	Remarks.
10	Congenital imbecility	From birth	—	—	—	—	—	—	—
26	Ditto	"	—	—	+	—	—	—	—
38	"	"	—	—	—	—	—	—	—
43	"	"	—	—	—	—	Normal	—	—
50	Progressive dementia	2 years	—	—	—	—	—	—	—
51	Congenital imbecility	From birth	—	—	—	—	—	—	—
44	Epilepsy	Over 15 years	—	—	—	—	Normal	—	—
45	Epileptic	4 years, probably longer	—	—	—	—	"	—	—

Occasional Notes.

British Medical Association, Annual Meeting, 1911.

The Section of Neurology and Psychological Medicine held a series of highly successful meetings under the Presidency of Dr. Edwin Goodall in Birmingham in July last.

Further justification was thus afforded of the action of those who decided to associate these two subjects in one section.

It is manifest, from a perusal of the titles of the subject-matter under the heading of Psychological Medicine, that those responsible for organising the work of the meeting had decided that the discussion and the papers should deal chiefly with the objective, with matters of observation and experiment. Thus, the Address of the President—himself concerned with the care and treatment of the insane—was entitled the "Possible Toxic Origin of Some Forms of Insanity"; Dr. F. W. Mott opened a discussion upon "The Relation of Head-Injury to Nervous and Mental Disease"; Dr. Stanford (Research Chemist at Cardiff Mental Hospital) contributed a paper on "The Need for Chemistry in the Investigation of Mental Disease"; Dr. Winifred Muirhead one upon "The Wassermann Reaction in Insanity." The remaining paper in psychiatry was on "The Significance of Some Confusional States," by Dr. H. Devine.

We may deal with the salient features of some of these communications. The President's Address reviewed the position of our knowledge of toxæmia, exogenous and endogenous, as a cause of insanity; it summarised certain original observations upon the bacteriology of the fæces in mental disorders, and dealt with the bearing of these upon the problem of intestinal toxæmia. The observations gave no support to the views promulgated by certain Italian workers as to the toxic action of the putrefactive intestinal anaërobes, and pointed out the lines upon which the toxicity of these and other intestinal organisms should be tested. The President stated his view that the outstanding pathological fact indicating a toxic pathogenesis for some of the psychoses was leucocytosis, and summarised our knowledge of the leucocytosis present in different forms of insanity and in different phases of the disorder. Perhaps the most significant statement of this portion of the address was that referring to the existence of a lymphocytosis in six cases of well-marked remission of general paralysis, in view of the fact that in protozoal maladies the reaction of the white cells towards infection is by a lymphocytosis, not by a polymorphonuclear leucocytosis. The address made it clear that further systematic research in this branch of hæmatology is required, as the results obtained by workers in different countries

go to show that useful information from the point of view of prognosis is likely to be obtained from quantitative and qualitative leucocytal counts. The address concluded with instances which showed the need for the aid of the physiologist and the chemist in investigating the problems of metabolism in mental disorder.

Dr. Stanford's paper constituted a strong argument for delegating to the trained chemist the function of investigating the problems of bio-chemistry. It is not to be expected, as he put it, that the physiologist who pursues chemical methods should be properly equipped to deal with the remarkable difficulties of a purely chemical kind which will beset his path. It is certain that the employment by so-called "physiological chemists" of discredited or unaccredited chemical methods in investigating the bio-chemical problems of insanity has led to results upon which unjustifiable conclusions have been founded. In fact, the application of chemical methods by chemists to these problems is quite a new development. No doubt there is need, amongst other workers, for the physiologist in the investigation of the problems of insanity; but instances in which a physiologist is also a skilled chemist and *vice-versâ* are so rare as to be negligible.¹

Of the two discussions, both of which were obviously of interest and were well sustained, the first, on "The Different Types of Multiple Sclerosis," was opened by Prof. Oppenheim, of Berlin, and was of purely neurological interest. In his reply on the discussion, Prof. Oppenheim took occasion to state his experience that slight mental symptoms (such as weakness of memory, irritability) were not rare in multiple sclerosis, and he had also found real psychoses, but a progressive dementia was very uncommon. In this point, and in the very slow course of the disease, lies the essential clinical difference between it and paralytic dementia.

The second discussion, which was opened by Dr. F. W. Mott, was upon a topic of great interest, alike to neurologists and to alienists, namely, "The Relation of Head-Injury to Nervous and Mental Disease." Dr. Mott drew attention to the medico-legal importance of distinguishing cause from coincidence in cases of head-injury in relation to nervous and mental

¹ For a critical review of recently-published work in the domain of the chemical pathology of the psychoses see R. Allers, *Journal f. Psychol. u. Neurol.*, Bd. xvi, H. 3-6, pp. 157, 240.

disease, which has been enhanced since the introduction of the Workmen's Compensation Act, and which will increase under the operation of the new Insurance Act. Throughout his address the speaker illustrated his remarks by apt cases drawn from his large experience as a neurologist, and from the immense material at his disposal in the London County asylums. It is particularly by reason of the mass of cases he draws his figures from that Dr. Mott's findings are so valuable. We can merely mention the main features with which the address dealt; thus, the relatively few cases of head-injury which come into the London asylums, having regard to the large number admitted to hospitals and discharged (probably the experience in the provinces is the same); the extreme rarity of head-injury as a prime cause of insanity; it is, in fact, difficult to assert that head-injury ever acts as more than a contributory cause, and it is rare even as a co-efficient (nevertheless, cases of psychoses are from time to time described¹ in which the sole cause after careful inquiry has been head-injury, such injury having in the first place produced the symptoms of "commotio" or "concussio" cerebri, followed later on by the psychosis; the prognosis is usually favourable); the rarity of a history of trauma in cases of general paralysis which came to autopsy; in none of these cases could one, in Dr. Mott's judgment, assume that the head-injury was the principal cause of the general paralysis; as regards epilepsy, trauma is a rare cause of it, but it is most difficult to decide how far head-injury is the primary or sole cause, how far merely a contributory factor; the difficulty of estimating the effects of head-injury, when all the subsequent symptoms are subjective ("functional neuroses and psychoses"); the importance of the Wassermann reaction in deciding the existence of pre-existing syphilis in cases of organic disease of the nervous system alleged to be due to trauma. Dr. Mott's address constitutes a valuable source of information upon a topic of supreme practical importance to the profession.

The number of asylum laboratories in this country in which the Wassermann test is carried out is probably still comparatively limited, and workers with the necessary technical experience are few. The difficulties of carrying out the test have, of late, been considerably diminished, certain reliable sources

¹ *Vide* Trömmner, "Ueber traumatische (Concussions-) Psychosen," *Zeitschr. f. Neurologie u. Psychiatrie*, Bd. iii, 1910.

being now available from which those constituents of the test which have been most difficult to secure may be obtained. But unless the technique of the test has been thoroughly learnt, misleading and unreliable results will be obtained. No doubt can exist that the Wassermann test should be applied in the first place to the blood, and if necessary to the cerebro-spinal fluid, in all cases admitted to institutions for the insane in which there is reason to suspect syphilis or meta-syphilis of the nervous system; and the protein- and cell-content of the cerebro-spinal fluid should be estimated when that is withdrawn. Amongst the most experienced workers on the subject in this country, Dr. Winifred Muirhead, of the Royal Asylum, Edinburgh, must be counted, and the summary of her work, which was presented at the Birmingham meeting, constitutes a solid contribution to the subject.

Part II.—Reviews and Notices.

The Sixty-fifth Report of the Commissioners in Lunacy for England, 1911.

The Commissioners have this year very conveniently divided their report into two volumes. Part I contains the report proper, and Part II statistical tables and various other appendices.

The *total number of certified insane persons* in England and Wales was 133,157 on January 1st, 1911, being an increase over the previous year of 2,604. The average annual increase for the ten years ending 1910 was 2,521, and for the quinquennial period ending the same time, 2,236. The figures for 1910 showed an increase over the average for these two periods of 83 and 368.

Private patients numbered 10,890 (males 4,709, females 6,181)—an increase of 2·5 *per cent.* (males 1·9 *per cent.*, females 3·1 *per cent.*) The Commissioners note a remarkable change in the sex distribution. The males increased proportionately up to 1869, but have gradually declined and, since 1890, the females predominate. Private patients in county and borough asylums, hospitals and private care, have increased, but those in licensed houses have decreased by 1·1 *per cent.*

Pauper patients numbered 121,172 (males 56,142, females 65,030), the rate of increase being 1·9 *per cent.* (males 1·8 *per cent.*, females 1·9 *per cent.*). In this class the females have always predominated. The proportion housed in hospitals and licensed houses was barely 0·7 *per cent.*

The Commissioners advocate the establishment in the provinces of institutions similar to those of the Metropolitan Asylums Board by

co-operation of boards of guardians, which would relieve the work-houses, often so ill adapted for the care and treatment of the insane, and which would do something to lessen the continually increasing calls for more accommodation in the county asylums, besides being more economical. We can commend this proposal if the lethargy of our political masters in providing for the control of the feeble-minded is to continue. We trust, however, that before long the whole problem of the care of the harmless chronic insane, feeble-minded and criminal, will be grappled with, and suitable institutions provided, the acute insane being housed in proper hospitals of recent design or in the existing asylums suitably adapted. In any case, we think there should be only one administrative control over this class of the population.

It is to be regretted that the insane criminal continues to be distributed amongst the ordinary asylums owing to the failure of the Government to extend its accommodation. These unwelcome and baneful additions to our asylums comprise now 18·3 *per cent.* of the whole number of criminal lunatics.

The *rate of increase and decrease* in the various Counties and County Boroughs as compared with 1909 (Table X) is commented upon at length. It is pointed out that more accurate comparison is afforded by a study of Table XI, which gives the yearly averages in quinquennial periods. Briefly, the average annual increase for the Counties is 1·5 *per cent.*, and for the County Boroughs 2·5 *per cent.* The highest rates for the Counties are yielded by the Soke of Peterborough, Middlesex, Hants, Herts, East Sussex and Surrey. London is only 0·1 *per cent.* above the mean rate. There is a decrease in Beds, Brecknock, Isles of Scilly, Dorset, Montgomery, Radnor and Salop. The highest rates in the County Boroughs are those of Hastings, West Hartlepool, Canterbury, South Shields and Bournemouth, while Birkenhead, Ipswich, Portsmouth, St. Helens, Swansea and Wolverhampton show a decrease. The smaller boroughs show an increase of 1·0 *per cent.*, being most marked in the case of Bedford, Bury St. Edmunds, Colchester, King's Lynn, and Newcastle-under-Lyne.

The report next deals with the *comparative statistics of the insane and general population*. The Commissioners state that whilst the general population is estimated to grow by fairly regular increments, the numbers of the insane are less steady. On January 1st, 1911, the notified insane stood to the estimated population to the proportion of 1 to 275, or 36·4 per 10,000. Ten years ago it was 1 to 302, or 10 *per cent.* less. In fifty-two years it has increased by 95 *per cent.*—chiefly in the pauper class.

The annual admissions to care in comparison with the population, which attained a maximum of 6·93 per 10,000 in 1902, has gradually fallen since to 6·04 in 1910.

We think it is a pity that statistics are not possible based upon the date of commencement (first-attack cases particularly), and not on the date of certification. Still, statistics, however imperfect, show that although the number of certified persons has increased from 23·93 per 10,000 of the population to 36·40 in forty-two years, this is not due since 1902 to a greater number of persons becoming certified each year in

proportion to the population ; on the contrary, the ratio of admissions during this period has shown a steady decrease (Table III). The Commissioners say that as regards first admissions, a record of which has only been kept since 1898, the figures, about 5 per 10,000, bear a very constant proportion to the total in every year. While we admire this cautious attitude, it is only just to point out that a reference to Table III shows a fairly steady decrease in these figures also since 1902 the numbers, males and females, 5.52 per 10,000, falling in 1910 to males 5.01 and females 4.92 per 10,000. We cannot, from the Commissioners' report, see any evidence of the increased occurrence of insanity. On the contrary, all statistics available point to a decrease, but the Commissioners take up a more non-committal position. They conclude that "such facts as are available tend to the conclusion that if insanity is increasing at all, it is doing so very slowly, and by no means proportionately to the increasing number of insane persons under care." The report shows the obvious fact that these increasing numbers are due to accumulation, or the survival of chronic and irremediable insanity. The surplus *per cent.* of the admissions, after deducting the discharges and deaths, was—for 1871, 2.3; 1895, 12; 1902, 14.7; and for 1910, 10.3.

The *daily average number resident* increased from 82,122 in 1900 to 105,580 in 1910. There was a falling off in the proportion of insane detained in workhouses, and also in licensed houses, few of which now contain any pauper patients. We think this may be due to the County and Borough authorities being more alive to their obligations in this respect.

The *recovery-rate* calculated on the total admissions was 34.31 *per cent.*, being 2.18 below the average for the past ten years. It was 34 in the asylums and 52 amongst patients in single care. It is estimated that one quarter of those discharged recovered are re-admitted later. The lessened recovery-rate we think should eventually lessen the number admitted, since it probably points to relapsing cases being retained permanently under care or for longer periods.

The *death-rate* was 9.26 *per cent.*, being the lowest yet recorded.

The *form of insanity in relation to age and sex* is considered at length. This praiseworthy work makes us regret that a better classification of insanity is apparently impossible at present. In both sexes there is a heavy drop in epilepsy after forty-four. General paralysis affects women steadily from twenty-five to sixty-four, but in men it occurs more frequently from twenty-five to forty-four. Maniacal excitement in both sexes favours the adolescent period. Probably much of this is dementia præcox. Melancholia in women occurs later in life, due probably to the climacterium. Child-birth probably brings up the figures for both mania and melancholia in women between twenty-five and forty-four. Delusional insanity in women predominates in later years probably for the same reason as melancholia. Primary dementia in both sexes is mainly found in early life. This is interesting as showing that this head is also being largely used for dementia præcox.

As regards *causation*, the Commissioners, fortified by more reliable data, will be heard with greater respect as years go by. Reference is made to Dr. Mott's work on heredity. Regarding heredity, two para-

graphs are worthy of quotation. After stating that for thirty years the statistics have shown hereditary taint in 19 *per cent.* males and 23 *per cent.* females of the admissions, the report goes on to say :

"To ignore the factor of inheritance because thrice the number of insane apparently come of sane stock as there is of those with a family history of insanity would be unwarrantable. For the total number of the insane forms a mere fraction of the whole community, and it is inconceivable that there is anything approaching 25 *per cent.* of the sane population in whose immediate forbears or their collaterals insanity has occurred."

Again—

"That there is a natural limit to the extent to which such a transmitted tendency is carried through successive generations is supported by our statistics, which show that there has been but small variation during many years in the proportion of the insane in whose cases this heredity factor was ascertained. Had there been no such check in operation this proportion would in all probability have grown with the increase in the numbers of insane persons, but, of course, not to the same degree, owing to the permanent segregation of the majority."

We imagine this will interest the students of eugenics. We think it is unfortunate that the percentages of ætiological factors are calculated in every case on the total number of admissions and not in some cases on the number of cases where histories have been obtained.

Several pages are devoted to the *diseases of the insane*, and a comparison attempted between the relative frequency of certain diseases as shown by the causes of death in the insane and in the general population (see also Sixty-second and Sixty-third Reports). The figures for 1909 are dealt with, general paralytics and those under fifteen being omitted. It is shown that in the insane the alleged causes of death in order of frequency were as follows: Phthisis, senility, pneumonia, valvular heart disease, chronic Bright's disease, epilepsy, apoplexy, cardiac degeneration, cancer, bronchitis, and diarrhœa and dysentery. As regards the general population the order was: Phthisis, cancer, senility, bronchitis, apoplexy, pneumonia, valvular heart disease, chronic Bright's disease, cardiac degeneration, epilepsy, and diarrhœa and dysentery. Comparisons are also made between the occurrence of these causes in proportion to those living, either insane or of the general population. Amongst other facts, the greater frequency of cancer and bronchitis in the general population and of pneumonia in the insane is commented upon and discussed. A table is given showing that deaths from cancer are increasing in the insane.

We cannot completely accept all the Commissioners' deductions. The fact that the causes of death in asylums are in most cases ascertained by *post-mortem* examination may account for some of the differences. It seems possible that many deaths in the general population may, in the absence of a confirmatory autopsy, be wrongly ascribed to cancer, and that a degree of pneumonia found *post mortem* in asylums may preferably be put down as a cause of death in a case otherwise suffering from bronchitis. Similarly, the increase of cancer in the insane may be due to more searching autopsies being held.

As regards the *Asylums' Officers Superannuation Act*, 1909, the Commissioners express the opinion that they always considered that the

privileges of Class I were intended to apply to those who had continuous care and charge of patients. They should prefer to see placed in Class II those who have the supervision of patients during working hours only and are never engaged in the wards at all.

In dealing with the *cost of maintaining patients*, attention is drawn to the fact that the expected increase in the cost of "provisions" and "garden and farm" was only found in the case of Borough Asylums, and that, on the contrary, in the County Asylums there had been a decrease in expenditure under these heads. They think this points to a parsimonious tendency in some institutions. It seems to us possible that the much greater number catered for in the County Asylums may enable them to make more favourable contracts than in the case of the smaller Borough Asylums, and that this may to some extent account for the difference in expenditure.

It is impossible in a limited review to touch upon all the important points raised by the Commissioners in their valuable report, which contains, as time goes on, more and more material of importance and interest to the alienist. We regret to have to omit the consideration of the excellent summary of the occurrence of dysentery and tuberculosis. We note with gratification that again there is appended an account of scientific research work undertaken in the asylums during the year under review.

Fifty-third Annual Report of the General Board of Commissioners in Lunacy for Scotland.

The statistics given in this report show that at the close of the year 1910 there were in Scotland (exclusive of insane persons maintained at home by their natural guardians) 18,636 insane persons officially known to the General Board of Lunacy, of whom 2,622 were maintained from private sources, 15,958 by parochial rates, and 56 by the State. This is an increase of 299 on the corresponding figure for the previous year. Of this increase 32 were non-registered lunatics, namely, 3 in the Criminal Lunatic Department of Perth Prison, and 29 in training schools for imbecile children; while 267 was the increase of registered lunatics, that is, those whose names come on the General Board's register, and who are provided for either in establishments for the insane or in private dwellings under the inspection of the General Board. In establishments (royal, district, private, and parochial asylums, and lunatic wards of poorhouses) there was an increase of 17 private patients and 219 pauper patients, total 236; in private dwellings there was a decrease of 4 private and an increase of 35 pauper patients, making together an increase of 31. During the preceding five years the average annual increase of pauper patients in establishments had been 169, and the actual increase in the year 1910 has therefore been considerably more than that average. Eleven counties or urban areas show a decrease in the number of their pauper lunatics, while in twenty-seven an increase had taken place. The proportion of registered lunatics per 100,000 of the estimated general population of Scotland is tabulated

as 366 (private 49, pauper 317); but as the census taken since the issue of the Blue-book has shown that the general population has not increased so much as was expected, this figure may have to be put somewhat higher when the actual figures can be compared.

Exclusive of transfers from one establishment to another (the number of which was 363), there were admitted to establishments during the year 506 private and 2,806 pauper patients. This shows an increase of 10 private and 53 pauper cases on the corresponding figures for the year 1909; but in each case the number is still considerably below the average for the quinquenniad 1905-09. It is pointed out that in the case of pauper patients, when the figures for 1909 are excluded, it is necessary to go back for thirteen years to find a number of admissions lower than that for the year 1910. From establishments there were discharged as recovered 215 private and 1,031 pauper cases. Calculated on the admissions, exclusive of transfers, the proportion of recoveries was 42.5 *per cent.* for private patients and 36.7 *per cent.* for pauper patients. The recovery-rate among private patients, while varying somewhat from one year to another, has shown no certain indications of falling off, but among pauper patients there has been a continuous decrease for many years past, and in 1910 the rate was 11 *per cent.* lower than in the quinquenniad 1880-84. This decline in the recovery-rate is accounted for to some extent by the greater use of observation wards in connection with parochial or general hospitals, by which a proportion of persons suffering from short attacks of mental disorder are saved from entering an asylum for treatment; but it is doubtless due mainly to the unfavourable change in the character of the cases now sent to asylums, comprising, as these do (as clearly shown by statistics), a much larger proportion of senile cases and of cases suffering from incurable physical disease in addition to the mental ailment. The number discharged unrecovered from establishments in 1910 (again exclusive of transfers) was 112 private and 375 pauper cases. Calculated on the average number resident, this gives a rate of 4.9 *per cent.* for private and 2.9 *per cent.* for pauper patients, and shows that the falling off in the unrecovered discharge rate, to which attention has been frequently drawn in previous Blue-books, is becoming even more marked, and accounts relatively for a part of the accumulation of cases which is taking place in asylums. The number of deaths in establishments was 1,344 (private 163, pauper 1,181). Calculated on the number resident this shows a death-rate of 7.1 *per cent.* for private and 9.3 *per cent.* for pauper cases, or 9.0 *per cent.* for the two classes taken together. A series of tables is given to show the number of deaths from general paralysis in different periods since 1865, and the sex, age at death, and length of asylum residence in these cases. These tables indicate that about 47 *per cent.* of the male cases succumbing to the disease die with less than one year's asylum residence. The total number of deaths has varied from year to year, and appears to have risen considerably among males in the last quinquenniad; but it is pointed out that no reliable conclusion as to the prevalence of the disease can be drawn except by comparison with the number of the general population of the country at the same age-periods, and this it is proposed to make when the figures of the recent census become available.

In private dwellings there are under the cognisance of the General Board 116 private and 2,878 parochial patients. The number of pauper cases thus provided for is the highest yet reached, being 35 more than in the preceding year, and of these there are 968 under the care of relatives, and 1,910 placed with strangers. More than two-thirds of those who are under the charge of unrelated guardians are in houses specially licensed to receive two, three or four patients; the remainder, as well as almost all patients living with relatives, are accommodated singly in houses which, having only one patient, require no special license. Of the licensed houses the great majority take only two patients. Reference is made to the difficulty often experienced in getting small parishes to take active steps for boarding out patients in this way. To some extent this is due to the relatively greater expense and trouble involved to these parishes when only a small number of patients is being dealt with, and in this connection it is of interest to note that in one of the Lunacy Bills now before Parliament, it is proposed to take power for combining parishes into districts sufficiently large to allow of a special officer being appointed for boarding-out purposes. The reports by the Deputy-Commissioners in the appendix of the Blue-book contain references to several points of great practical interest and importance as showing the results of different methods adopted by guardians in dealing with their patients.

As in previous reports, the difficulty of finding accommodation for the poorer class of private patients is referred to, and it is pointed out that in district asylums there is, in addition to the regular private patients (who at January 1st, 1911, numbered 310), a large and increasing number of patients who are in the institution as paupers, but who repay (either through their relatives or from other sources) the entire cost of their maintenance to the parishes to which they are nominally chargeable, and who, therefore, should properly appear as private patients. At May 15th, 1910, there were 244 such cases. It is therefore again urged that permissive power should be given by statute to district lunacy boards to provide accommodation for private patients under conditions which would make it available for this class. In the Lunacy Bill before Parliament already referred to, one of the clauses proposes to give this power.

The usual information regarding the expenditure on account of pauper lunacy in Scotland is given. It shows that in district asylums for the year 1909-10, the charge for "providing expenses" or rent (that is, cost of land, buildings, and their upkeep, etc.) represented an average of £15 18s. per patient, and that for maintenance expenses (food, clothing, and management of patients) the average cost was £25 16s. 6d. For pauper patients in royal asylums, lunatic wards of poorhouses, and private dwellings, the item of "providing expenses" or rent does not appear separately, but is included in the general charge for maintenance. Taking all asylums (royal, district, and parochial) together, and including institutions for imbecile children, the average outlay for maintenance per pauper patient was £27 2s. 5d.; in lunatic wards of poorhouses it was £21 1s. 8d., and in private dwellings £18 6s. 9d.

A considerable part of the Report deals with the working of the

Asylums' Officers Superannuation Act, which applies to district asylums in Scotland, and came into operation at May 15th, 1910. The Act provides for the division of pensionable officials into two classes according to the nature of their work, with different pension allowances. "When the Act was under consideration it was generally recognised that the terms of Section I made it possible for asylum managers to take widely divergent views as to the proper classification of their officials, and, indeed, it was the difficulty of framing a definition, separating the two classes and applicable to all asylums alike, which led to the division of classes being left in the first place to local bodies, subject to the consent of a higher authority." Class I includes those who have "the care or charge of the patients in the usual course of their employment," and it is evidently the opinion of the General Board that under this definition it should be regarded as being "mainly confined to persons whose employment consists solely in having the care or charge of patients, and should not as a rule include persons otherwise employed in the asylum whose duties are essentially of a different nature, notwithstanding that in the performance of these duties they may be assisted by patients who will necessarily be under their supervision as long as these duties last." The Act further appears to give district lunacy boards power to determine which of those employees who do not come into Class I shall be declared to be "established for pension purposes," and which shall be left out, and the General Board consider that they have no power to review the decisions of the district boards in this matter. It has thus come about that the provisions of the Superannuation Act have been interpreted and applied in varying ways in the different district asylums, and further, the action of the employees themselves in availing themselves of the Act or in "contracting out" has also varied greatly in different institutions. The report gives much detailed information, with relative tables, as to the extent to which the Act has been adopted, and also as to the value put upon the emoluments of different officials—a point which has to be kept in view in calculating the pension contributions and allowances. As was to be expected, the male employees elected to come under the Act in much larger proportion than the female.

It remains only to mention the changes in the *personnel* of the General Board. The elevation of Mr. Macfarlane to the bench as Lord Ormidale made a vacancy in the legal membership, which was filled by the appointment of Mr. J. A. Reid, K.C., Sheriff of Ross and Cromarty and Sutherland. The senior Medical Commissioner, Dr. John Fraser, retired, and has been succeeded by Dr. Hamilton C. Marr, formerly medical superintendent of the Glasgow District Asylum at Woodilee.

Sixtieth Report of the Inspectors of Lunatics (Ireland) for the Year ending December 31st, 1910.

From the summary at the opening of the Report we learn that the number of insane under care in Ireland at the close of the year 1910 was 24,394, being an increase of 250 over that of the previous year, an

increase considerably greater than the last recorded (1909), which was only 213, but still 78 less than the average increase for the preceding ten years, which was 328. The daily average was 20,293, being a rise of 308. There is no need, however, for the statistics of a single year to discourage the hope that we are nearing the limit of the "increase of insanity." This point was dwelt on in the review of last year's Blue Book, and we shall be in a better position to make a correct estimate when the census returns for 1911 become available. As regards the distribution of the insane in institutions, 84 *per cent.* are now located in district asylums, 11 *per cent.* in workhouses, and 5 *per cent.* in private asylums. Five years ago the corresponding ratios were 81, 14, and 5 respectively. The tendency, therefore, of the proportion of insane in district asylums to increase and of those in workhouses to diminish continues, while that of patients in private asylums remains stationary.

If we take the ratio of insane under care per 100,000 of estimated population, we find that it increased by six during the past year, but, as shown by the table on p. 13 of the Report, while the average rate of increase for the entire period of thirty years, from 1880 to 1910, was over 10 per annum, that of the last five years was only 5. This is, so far, encouraging.

May we again suggest that the value of this table, and that on p. 15, giving the proportion per 100,000 of admissions, would be rendered much more valuable and educative by the addition of an extra column setting out the *averages for five-year periods*, as is done in Table VII with respect to recoveries and deaths. Lunacy statistics for any single year, or even a short term of years, teach practically nothing, whereas when they embrace a long series of years divided into a number of consecutive five-year periods, they are calculated to be of the highest utility in giving, as it were, a bird's-eye view of the progress of lunacy, and enabling anyone who makes even a cursory study of the figures to draw correct inferences as to the increase or decrease of insanity, and possibly to build some prognostications thereupon as to the future.

The admissions to district asylums show a net decrease of 25 as compared with 197 in the previous year, first admissions having increased by 2, while re-admissions decreased by 27. The proportion per 100,000 of population, however, remain exactly the same as in 1909, *viz.*, 65 for first admissions, 17 for re-admissions—total 82. On the whole, therefore, the statistics of last year give no support to the view that there is any material increase in insanity; they rather point the other way. During the period 1901–1905 the ratio of total admissions was 86·8 per 100,000 of population, whereas in the last quinquenniad, 1906–1910, it fell to 83·6; and the ratio of first admissions, the crucial test of the increase of insanity, shows a still greater fall in the same two periods, *viz.*, from 69 to 65·2. Such figures give no ground for alarm.

Of a total of 3,756 cases admitted, no less than 2,351 were committed on warrants as dangerous lunatics, or much more than half. This method of procedure, not found necessary elsewhere, under which a patient mentally sick is treated as a criminal, arrested on warrant, and conveyed by the police to hospital for treatment, exists in Ireland alone of all civilised countries—a practice which has only to be mentioned to be condemned, a scandal which would not be tolerated but that the method

has been so long in force, and the ruling authorities so supine and indifferent as regards taking any steps to abolish such an anomaly, that the public have long accepted it as a matter of course, an instance of "how use can breed an habit in a man"—or a nation.

The percentage of recoveries on admissions was 36.5, being 1.9 *per cent.* lower than that of the previous year. From Table VII, which gives the average recovery-rate for 5-year periods, we find that this has been nearly stationary during the past eighteen years. The tendency from this on will probably be towards a lowering of the rate on account of the larger number of senile and incurable cases now sent to asylums than formerly. The differences of the recovery-rate in individual asylums is always a remarkable feature, as also the annual fluctuations in the same asylum. Last year Monaghan took the lead with close on 60 *per cent.* (59.6) recoveries, whilst in the previous year it was 48.8; Carlow takes the lowest place with a percentage of only 20.6 recoveries, while the rate in Londonderry, which was the lowest (25.2) in 1909, has jumped up to 44.6. This only proves, what has been frequently animadverted on in these pages, that no reliable conclusions can be drawn in the case of lunacy statistics from the figures of a single year. If two successive periods of, say, ten years in the case of any asylum were compared, the average recovery-rate in each would not be found to show any marked difference.

The death-rate, while varying within rather wide limits as regards individual asylums, remains curiously constant for the whole of Ireland, the averages of the last three periods, as scheduled in Table VII, showing the ratios to daily average to be 7.8, 7.5, and 7.7 respectively. The lowest death-rate was in Armagh, 4.5, and the highest in Enniscorthy, 10.2. The rate in each case seems to have been exceptional, as, on referring to the reports of each of these asylums, we find that the average death-rate for ten years preceding was 6.6 and 6.8 respectively; that is, the rates were practically the same.

The mortality from phthisis is decidedly on the decline in Irish asylums, both absolutely and relatively to the total mortality. Last year the deaths from this cause were 313 out of a total of 1,479, a ratio of 21 *per cent.* In the previous year there were 350, or 22.7 *per cent.* The number of deaths has not been so low since the year 1901, when they were exactly the same as last year; but as the total number of deaths from all causes in the earlier year was only 1,257, this represented a higher proportional mortality from phthisis of practically 25 *per cent.* The ratio to total mortality during the quinquennium 1890-1894 was 27 *per cent.*, and in the last similar period, 1906-10, 24.4. In 1904 it reached its highest point, 28.4, and has steadily fallen from that to 21 *per cent.* last year.

May we again venture to suggest the advantage of an extra column to the table on p. 18, giving the percentages to total mortality of the diseases specially scheduled there, *viz.*, phthisis, general paralysis, and epilepsy; and if, in addition, the averages for five-year periods could also be given, the value of the table would be greatly enhanced.

The deaths from general paralysis numbered 59, or practically 4 *per cent.* as compared with 5 *per cent.* in the previous year, showing a distinct reduction; but the average mortality for the past five years was

4.2 as compared with 3.7 in the previous quinquennium. The mortality from this disease must, therefore, be regarded as on the increase; only in the cities of Belfast and Dublin, however, which contribute three-fourths of all the cases.

It is regrettable that the number of *post-mortem* examinations continues to decrease. The numbers for the past four years were 253, 235, 222 and 197 respectively, this last figure representing a percentage of only 13.3 of the number of deaths. There are, admittedly, peculiar difficulties connected with these examinations in Irish asylums, but the prejudices of the public against them ought to decrease with time and the advance of knowledge, and the fact that there is a progressive decrease in the number of autopsies does seem to indicate a certain amount of supineness on the part of the medical staffs.

The reports on the condition of the insane in workhouses are of a much more favourable character than formerly. In most instances the guardians have at last begun to realise their responsibilities towards this very helpless class. In former years in not a few workhouses the insane got very little more care or attention than would be given to the herding of animals. In course of time it is hoped that all these patients will be transferred to asylums, or other properly equipped institutions. This, however, will probably not be effected for some considerable time. It is therefore satisfactory to note a material improvement in the conditions under which they are obliged to live. One workhouse, however—Kilkenny—deserves to be put in the pillory, as the arrangements there are little short of disgraceful. The Inspector reports that the accommodation provided for the men is dark, ill-ventilated, and dirty, the bedclothes are neglected. There is no hot water supply, and no proper means of washing at either side. None of the women attend any form of religious worship, though some of them appear perfectly fit to do so. "The condition of these imbeciles calls urgently for some improvement."

The only change amongst the medical superintendents during the past year was the retirement of Dr. George F. West, of Kilkenny Asylum, in February last. Dr. West had been in the asylum service for over thirty-one years, having been superintendent in Kilkenny Asylum for fourteen years. He had previously served as assistant medical officer in Omagh Asylum. He has been succeeded by Dr. Buggy, who has been assistant in Kilkenny since the year 1893.

This is the first joint report of the new Irish inspectors, Drs. Conside and Dawson, who have succeeded the late Sir George O'Farrell, and Dr. Courtenay, the latter of whom resigned office in April last. The death of Sir George O'Farrell, so shortly after his retirement, when his many friends were anticipating for him at least some years of well-earned leisure, and a green old age, was an event which caused deep and wide-spread regret. And Dr. Courtenay's resignation deprived the Irish Lunacy Office of an eminently practical mind, his long experience in asylum administration previously to his promotion to the position of Inspector having made him exceptionally well fitted to discharge the important duties appertaining to that office.

It is only a just tribute to our late Inspectors to say that both the Irish asylum service and the public generally are under the greatest

obligations to them for their continuous efforts with a view to the greater efficiency and usefulness of the department. And, while asylum medical officers cannot but retain a grateful recollection of their invariably kind and considerate attitude towards themselves personally, they must esteem very highly the candour and straightforwardness which always characterised their dealings with faulty or ineffective administration, as it was evident that their one aim, pursued with single-heartedness and pertinacity during their entire term of office, was to raise the standard of asylum management, both medical and general, throughout the country ; and if this goal was not fully attained, which none would probably be more willing to acknowledge than themselves, their efforts in this direction were largely crowned with success. To their successors we bid a hearty welcome, feeling confident that they, too, will keep the same high ideal in view, and so bring about still further advancement in everything that concerns the welfare of the insane in Ireland.

Body and Mind. By WILLIAM McDOUGALL, M.B. Methuen, 1911.

Dr. McDougall has added, in this book, one more to the attempts that mankind is always making to solve the insoluble. Every such attempt is fascinating in proportion to its ingenuity, and to the degree in which it takes account of the difficulties and tries to cover the whole field, and in these respects Dr. McDougall's attempt is very fascinating. It marks a full revolution in the progress of thought. The theory of the connection of mind with body begins with crude animism—with the assumption of a resident soul which is the actuating force that produces bodily movement and conduct ; which can escape in sleep from the trammel of the body, and live an independent existence, acting in much the same way, but more powerfully, when disembodied ; and which is freed from the body by death and lives thereafter indefinitely. The restless spirit of man, which has no peace until phenomena are explained, finds explanations of all happenings in the action either of embodied or of disembodied souls. Every event, every phenomenon, is ascribed to the action either of man, or of animals, or of spirits, either disembodied, or embodied but invisible. As investigation is pushed, more and more is man able to account mechanically for phenomena that he had formerly ascribed to spiritual action, and at length he ousts spiritual agency altogether, and accounts for everything, even for human conduct, nay, even for human mind, as matter or as mechanism. So surely as this conclusion is reached, so surely does the mind revolt against it. In a certain region mechanism fails, or seems to fail, and a natural revulsion not only re-establishes spiritualism or animism, but extends its domain, and makes it encroach upon the realm of matter. And so the see-saw goes on, and after millenniums have elapsed, Berkeley repeats Plato with a difference, and with a difference Huxley repeats Epicurus. Less than a generation ago, materialism, or rather mechanism, held the field, and to suppose the existence of a soul was, in the eyes of the high priests of science, flat blasphemy ; but of late years there have been many signs

that the pendulum had reached the limit of its swing, and was beginning to return towards animism. Lotze was for long the voice of one crying in the wilderness, and now Bergson and McDougall show that Lotze has not preached in vain; that the pendulum has passed the vertical and is rising on the opposite swing; that the revolution is approaching completion and perihelion will soon be reached once more.

But always with a difference. The refined materialism of Epicurus and Lucretius was as far in advance of the crude materialism of Cabanis as the refined animism of Plato was in advance of the crude animism of Homer. Huxley advanced on Epicurus as Berkeley advanced on Plato, and McDougall's animism is altogether different from that of Berkeley.

Whatever we may think of Dr. McDougall's conclusions, we must acknowledge that his treatment of the whole subject is comprehensive, acute, and eminently fair. He begins with a history of his subject from the earliest times, from the assumptions of primitive man to the speculations of philosophers now living, and his account, though it does not profess to be more than a summary, is a very good summary, is lucid, free from bias, and quite sufficient for its purpose.

The theories of the relation of mind to body are three, or are reducible to three groups—monism, interacting dualism, and parallelism. According to the first, mind and body are one. They are two aspects of one process. They are obverse and reverse. Mind is body and body is mind, and there is nothing to explain. Interacting dualism is another name for animism. It postulates a soul, acting on the body and being acted on by the body, and having its own inherent activity independent of the body, just as the body has certain inherent activities independent of the soul. Parallelism, which is the theory that has held the field for the last half century and more, is a dualism, but not an interacting dualism. It postulates brain processes and mental processes as invariable concomitants, neither having any causal influence on the other. In time of occurrence they are simultaneous, or almost simultaneous, and each proceeds in strict parallelism with the other, and reproduces, *mutatis mutandis*, the variations of the other; but they do not interact.

To each of these theories there are insuperable objections. With our limited knowledge and means of investigation we must suppose that one of them is true, but not one is really satisfying or will stand criticism. Dr. McDougall has made a brave attempt to rehabilitate animism, but it is very doubtful whether he will convince anyone who is not already converted, or is not waiting and longing to be convinced. His attempt is, however, the more to be commended and admired because of the extreme difficulty of establishing affirmatively any of these theories. Destructive criticism is easy, and Dr. McDougall has no difficulty in demolishing the several alternatives to his own hypothesis; nor is it a formidable task to attack this, but the task of construction is extremely laborious, is difficult and thankless, and Dr. McDougall has done it as well, probably, as it is possible to do it.

In my presidential address to this Association two and a half years ago, I said that although I did not myself plump for an interacting dualism, I should not quarrel with those who do; but I am now about

to falsify this statement, and examine the dualism of Dr. McDougall from the point of view of an independent critic, not committed to either of the alternative doctrines. First of all, let me refer my readers to my book on *Logic*, in which they will find (p. 226) a strict logical demonstration that the problem is insoluble. It is insoluble, not in the sense that squaring the circle is insoluble, for we can in fact ascertain the value of π within an approximation as close as we please. It is insoluble in the sense that the dweller in the interior of a sphere cannot see the convexity of the sphere, or view his dwelling from the outside.

Even if we were to hit upon the correct solution, we could never know whether it was correct or not; and hence, no doubt, the fascination the problem has for speculative minds.

In his destructive criticism of monism and parallelism, Dr. McDougall relies mainly, as all critics of these doctrines and of dualism have always relied, and as the opponents of the doctrine of the inheritance of acquired qualities rely, upon the argument of inconceivability. The doctrines that they attack lead to conclusions, or require conditions, that are inconceivable; and this inconceivability of consequences or conditions is adduced as conclusive proof of the falsity of the doctrine. It has long seemed to me that this argument is fallacious; moreover, it is double-edged. It is a boomerang argument, that not only slays the enemy, but sweeps back and decapitates the thrower. By the use of the argument of inconceivability, we can overthrow the doctrines not only of monism and parallelism, but of interacting dualism also; and not only of interacting dualism, but of gravitation, of combining proportion, surface tension, and every other ultimate or primordial action; and in historical fact, the argument was employed against Newton to demonstrate the absurdity of the theory of gravitation. Undue importance may easily be attached to the argument from inconceivability, therefore, but it will not do to scout this argument when employed to attack dualism, and allow it full weight in attacking monism and parallelism.

Dr. McDougall does not shirk difficulties, and he states the views antagonistic to his own with great force and clearness. The difficulties of admitting the truth of dualism are many, but the greatest and most cogent of them all, to minds trained in physical science, is undoubtedly the "closed circle" of physical cause and effect. We acknowledge physical impulses, currents of motion, transferences of energy—call them what you will—passing centripetally from the sensory end-organs to the cortex of the brain. We acknowledge redistribution, rearrangement, division, composition, and reinforcement, of these streams of energy in the cortex. We acknowledge the centrifuged currents passing outwards to the muscles and producing movement. All this ground is common to monists, parallelists, and dualists alike. The votary of physical science sees in this process a "closed circle" of physical process. At every step he sees molecular movement following certain paths of physical structure, liberating additional motion from store here and inhibiting the liberation of motion there; but he sees no room, no possibility, no conceivable occasion, for the intrusion at any step of this process, of a new factor, adding to, taking from, or altering the direction of the streams of energy. Such an intrusion is, in

his view, miraculous. It is the negation of all that he holds sacred—of the conservation of energy and the inevitable sequence of physical cause and effect. Once allow such intrusion, and anything may happen. Law is abolished, and chance and caprice are installed in its place. Now the axiom of science is that law is paramount, and the progress of science is the discernment more and more in every department of the universe accessible to human research, of the inexorable reign of law. This is the great obstacle in the way of the acceptance of an interacting dualism, and Dr. McDougall does not shrink from it. "Once admit," he says, "that psychical influences may interfere with the course of physical nature, and—'you don't know where you are,' you can no longer serenely affirm that miracles do not happen. . . . Thus the gates are opened to all the floods of spiritualism and superstition of every kind, which, to some gloomy scientists, seem to threaten to light up once more the fires of persecution and to drag down our civilisation from its hardly-won footing upon the steep paths of progress."

Until this position is carried, dualism cannot be accepted; and Dr. McDougall assaults the position from three different sides, or, rather, he seeks to overwhelm the defence by three excessive waves of attack. First he quotes the high authority of Clerk-Maxwell in support of the thesis that the direction of motion of particles in a system may be altered without doing work upon the system; second, he adopts a suggestion of Dr. Percy Nunn that the mind can alter spatial relations, while leaving unchanged the quantity of energy in the things whose relations are changed; and third, he boldly denies that the concept of the "closed circle" is anything more than an unproved hypothesis, holding true, perhaps, in the inorganic world, but not applicable to the processes of living beings.

I do not propose to argue these matters out—an undertaking that would be beyond the compass of a review; but lest Dr. McDougall's readers should be fascinated, as they well may be, by the way in which he presents his arguments, let me set forth certain obvious considerations that seem to me to stand in the way of their acceptance. What Clerk-Maxwell says in the realm of mathematical physics must be accepted. If he says a thing is so, we must acknowledge it to be so. But though the direction of motion of particles in a system may be changed by binding the particles together, without work done upon or in the system, it does not follow that the particles can be bound together without work being done; and though, if the latent energy of a stone that has been thrown up onto a terrace is not altered by moving it along the terrace, it does not follow that the stone can be moved without work being done. As to the third objection, that the law of conservation of energy is merely an empirical generalisation, the same is true of the law of gravitation; and the same evidence is available in both cases—the evidence of experience. If action on a certain hypothesis never brings us up against experience that contradicts the hypothesis, then we are bound and obliged by the constitution of our minds to accept that hypothesis as true. The arguments of science do not take nearly enough account of the legal doctrine of *onus probandi*.

There is no obligation on the holder of a doctrine which is never contradicted by experience to support that doctrine, as Dr. McDougall

requires, by showing that its foundations are consistent or intelligible. If there were such an obligation, the doctrine of gravitation must be immediately abandoned. The foundation of that doctrine is not a consistent explanation of the way in which gravitation works, for no such explanation has ever been given. When we find that the successful completion of every voyage, the successful prediction of every place assigned to a celestial body, all founded on the doctrine of gravitation, never lead us to an experience inconsistent with it, then we cannot help accepting it as true, and are under no obligation to defend it aggressively. The *onus probandi* lies on those who question it. And so the *onus probandi* lies on those who would question the doctrine of conservation of energy. It is not enough for Dr. McDougall to say it is unproved. It is proved in the most effectual way, by the absence of any contradictory experience when it is acted on. It is for him to disprove, not for those who hold it to argue in its favour. The mere statement that there may be a sphere in which it does not obtain is not even the beginning of a disproof. If he wants to upset it he must show crucial instances to the contrary. Then the *onus probandi* will be shifted to the other side.

It is impossible, within limits less extensive than those of Dr. McDougall's book itself, to examine all his arguments. Cogent and admirably stated, as for the most part they are, they fail to carry conviction to those who have thought much about the matter, and some are only superficially plausible. The argument from "meaning," the argument of the red and blue lights, and the telegram argument, and much else in the book, all assume a single level of consciousness, which no follower of the lamented Hughlings Jackson would for a moment admit. Granting that they would be valid if there were but one level, and that a low level, of consciousness, they are irrelevant, even absurdly irrelevant, if we assume various levels, each co-ordinating and unifying and integrating all its inferiors.

Though Dr. McDougall's arguments against all the alternatives to animism are unanswerable, arguments just as unanswerable exist against animism, and it would be very interesting to hear Dr. McDougall on the other side. No one is more competent to show the inherent weakness and unprovability of animism. The problem is in its nature insoluble, and however good a case may be made out for one of its quasi-solutions, it remains good only until an advocate of one of the others comes along and destroys that solution. Thus Prof. James Ward a few years ago destroyed parallelism, and established monism. Now Dr. McDougall destroys monism and establishes dualism. No doubt the next attempt will be to re-establish parallelism. It is the very insolubility of the problem that constitutes its fascination. It is the problem of the owl and the egg. If every owl comes from an egg, and every owl's egg comes from an owl, which was first? We may meditate upon it till we burst, and come no nearer to an explanation. It may be that in the far future the problem will be solved, but if it is, it will be because man has acquired some new faculty whose rudiment cannot now be discerned. We know that at some past time life originated, but we know not how; we know that at some past time mind originated in connection with life, but we know not how. Who shall say that there may not be a third

quality yet to be added, and that as life was added to some forms only of matter, and as mind was added to some forms only of living matter, so some new quality, of which we may have even now the unrecognised rudiment, may yet be added to some forms only of animal life? Then perhaps we shall be as gods, knowing good and evil, and able to recognise the true relations of mind and body; but till then we must be content to accept provisionally that form of monism, parallelism, or dualism, which most appeals to our prejudices, and be thankful to writers like Dr. McDougall, who can show us plausible reasons for adopting the faith that we desire to believe.

The book is a handsome volume of 379 pages, and the argument throughout is clear and easy to understand. It would be still clearer and easier if more attention had been paid to the punctuation, which is, however, better than that of most writers on Science and Philosophy; and a protest must be entered against the profusion of footnotes. The reader is perpetually interrupted in his pursuit of the argument, and in his following of the train of reasoning, by reference to footnotes, the matter of which, in such a work, should be either embodied in the text, relegated to an appendix, or omitted altogether.

The proof reading is, on the whole, careful, but Dr. Priestley's name is persistently misspelt.

CHAS. MERCIER.

Conduct and its Disorders Biologically Considered. By CHARLES ARTHUR MERCIER, M.D., F.R.C.P. London: Macmillan & Co., 1911. Pp. 377. Price 10s. net.

We greatly regret that we are obliged to postpone our review of Dr. Mercier's book on this subject until our next issue. Those who remember Dr. Mercier's paper on "Insanity as Disorder of Conduct," read before the Association and published in this Journal in July, 1910, will be prepared for his point of view. His position did not commend itself to the meeting, and this book is presumably intended as an enforcement of Dr. Mercier's argument. He declares in his preface that while isolated departments of conduct have been studied for long enough, yet "of conduct as a whole; of what it is; of its nature; its varieties and kinds; of their relations to each other; of its vagaries and disorders; no book treats: no study exists." It is to remedy this defect that the book has been written, and it may be said to constitute a new science, which Dr. Mercier calls Praxiology. We insert this preliminary notice to draw the attention of our readers to a treatise which is written in Dr. Mercier's characteristically lucid style.

Die Wassermannsche Reaktion (The Wassermann Reaction). By HAROLD BOAS. Berlin: Karger, 1911.

In a volume of 186 pages, 45 of which consist of references to current literature, the author gives a description of the method of carrying out the Wassermann reaction, and a detailed account of his own observa-

tions as Director of the Serum Institute associated with the Hospital for Venereal Diseases in Copenhagen. The method which he used is essentially that originated by Wassermann, and he controls his experiments by repeated titration of the amboceptor of the hæmolytic system he uses. The hæmolytic system is that in which sheep's corpuscles are employed with sheep *v.* rabbit immune-body, the fresh serum of the guinea-pig being used as complement. He does not titrate the complement in the manner advised by Browning and Mackenzie, suggesting that in the sheep-rabbit hæmolytic system the complement does not show the variations which according to these authors it manifests in the ox-rabbit system. He used an alcoholic extract of heart muscle as antigen. The various modifications of the original Wassermann test are described and criticised, the author coming to the conclusion that they are all unreliable compared with the original method. With regard to the specificity of the test, he found only one positive result in 1,064 control cases examined. These controls included cases of acute fever, tubercle, tumour, skin diseases, and other various diseased conditions. With regard to the presence of the reaction in syphilis, he found 56 positive results in 76 cases in the primary stage. In the secondary stage 456 out of 468 cases gave a positive reaction. In the tertiary stage he divides the cases into those which had been treated and those which had not been treated. Out of 20 cases of the first class 16 gave a positive reaction, and out of 63 cases of the second class every one gave a positive reaction. He further examined 243 cases of latent syphilis within three years of the occurrence of infection; of these 89 gave a positive reaction and 154 gave a negative reaction. In general paralysis 139 cases were examined; the blood in every case was positive, and in 67 cases in which the spinal fluid was examined a positive result was obtained in 61. An important chapter is devoted to the examination of cases of congenital syphilis. In a very large proportion of these the blood-reaction was positive. The author in this chapter describes very fully the relation of congenital syphilis to maternal syphilis, and the presence of suppressed syphilis in the mother. The relation of treatment to the reaction is also discussed, and the importance of controlling treatment by regular examinations of the blood is emphasised. The volume is a valuable addition to the literature on the subject. It comes out of an institute which has a high standing in the world of scientific medicine, and the enormous experience of the author gives a great practical value to the conclusions and observations detailed.

J. H. MACDONALD.

Part III.—Epitome of Current Literature.

1. Neurology.

The Functions of the Prefrontal Lobes in Relation to Anatomical Data [*Le Funzioni dei Lobi Prefrontali in Rapporto ai Dati Architettonici*]. (Rev. di Patol. Nerv. e Ment., Sept., 1911.) Roncoroni, L.

In this careful and elaborate article, it is Prof. Roncoroni's aim to ascertain what conclusions can be drawn concerning the functions of the frontal region of the brain when the new anatomical data are brought into relation with clinical data and experimental data. The most various and divergent opinions have been put forth concerning the functions of this region from the now exploded view that it is the special seat of intelligence, to the view of Sciammana that it is the centre for organic innervation. Clinical evidence by itself has thrown no light on the matter, and Roncoroni divides into nine groups the widely divergent evidence furnished by clinical observation. Some cases have shown no psychic lesion; in others the symptoms were clearly due to general cerebral pressure; in others they were epileptoid; in others simple disturbance of memory and judgment; and so on. These discordant results are not difficult to account for; it is seldom possible to be sure that the pathological process is really limited, and in the case of tumour, for instance, no conclusion can be safely drawn until histological examination of the whole cortex has shown that there are no diffused lesions. Traumatic lesions furnish the most satisfactory evidence. In such a case, studied by the author, the lesion was limited to the left prefrontal lobe. At the outset motor aphasia appeared, but only lasted a few days. There was no apparent change in intelligence, emotional tone, moral feelings, or attention. The patient was, however, torpid. Partial verbal amnesia appeared. There was no difficulty in articulation. Errors in arithmetic were constantly made. There was also deficiency of facial expression. No psychic blindness, verbal blindness, or verbal deafness.

The results of experiment, also, when taken alone, are highly unsatisfactory. The removal of even the total hemispheres may have apparently little effect; there are great divergences in results even within the same species, and it is impossible to ascertain directly what the sensations of animals are.

As regards anatomical data, Roncoroni follows the modern tendency in regarding fissures and convolutions as comparatively unimportant as compared to areas characterised by similarity of structure. He describes his own studies of the frontal lobes, the results not altogether agreeing with those of Brodmann and Vogt, but he admits the discrepancy may be merely individual or due to difference of method. If, however, anatomical structure corresponds to function, we must believe that the prefrontal region has no definitely motor or sensory functions, but that the frontal lobe is, however, closely connected with the other cortical zones and subcortical ganglia.

As the author regards the matter, the psychic phenomenon can only be scientifically considered as resembling a reflex, with afferent, efferent, and intermediate phases. Many centres and many paths in the most varied parts of the nervous system must take part in this reflex psychic arc, which must be enormously more complex than a spinal arc, and it is impossible to admit those theories which would assign to intelligence, memory, will, consciousness, etc., a limited seat in the frontal lobes. The psychic arc must be regarded as including a whole series of paths and centres. So far as any definite statement can be made as to the prefrontal lobes, Roncoroni would say that they are concerned with "the elementary functions of that part of the reflex psychic arc which corresponds to the associations which are on the threshold of a conscious act."

HAVELOCK ELLIS.

Histological and Experimental Researches on the Choroid Plexuses [*Ricerche istologiche sperimentali sui plessi coroidei*]. (*Riv. Sper. di Fren.*, vol. xxxvii, fasc. 1 and 2.) Pelizzi, G. B.

In a publication of over 100 pages, Pelizzi gives an account of his investigations of the histology of the choroid plexuses. Frogs, birds, and various mammals furnished the material, but for purposes of experiment rabbits and then dogs, cavies and frogs were preferred. Due note is taken of the work of other authors. The main conclusions arrived at are as follows: Throughout the vertebrate series the choroid plexuses present essentially analogous features in their histology. In all species the nuclei of the cells contain nucleoli, granules and chromatinic filaments, and clearer roundish spaces of the karyoplasm free from chromatinic substance. The cell-protoplasm contains globoplastic granules, initial globes, and globes in course of secretion. For a long period of foetal life the choroid plexuses in bird and mammals are furnished with a large number of granular embryonal cells. In the human foetus these reach an enormous proportion and size. They consist of an accumulation of fatty droplets, with also some droplets of fatty acid disposed round the nucleus. This fat and fatty acid present special microchemical reactions. Small droplets of a fat which reacts like the neutral droplets of the granular cells are found irregularly scattered in the protoplasm of the choroid epithelium in course of formation. These granular cells and fatty droplets in the protoplasm begin to disappear before birth, and are entirely absent after the first stages of extra-uterine life; *pari passu*, the epithelial protoplasm assumes definite histological characters. The hypothesis might well be advanced that these elements are constructive cells destined for the formation of a part of the choroid epithelial protoplasm, and hence of the lipoid wall of the secretory globules formed from that part of the protoplasm. This lipoid wall, dissolved in the cerebro-spinal fluid, might then exercise a myelogenic action after the fashion suggested by Wlassak and Merzbacher in the case of the embryonic granular cells of the central nervous system. The granular cells of the plexus have probably a hæmatogenous origin.

The epithelial cells contain globules with a lipoid wall. These contain, dissolved in their plasma, a substance which presents microchemical reactions analogous to the nuclear and globoplastic granu-

lations. These are only nuclear granules passed from the nucleus to the protoplasm, and there closed with a special wall and gradually enlarged by absorption from the protoplasm of a special fluid substance so as to become secretory globules. There is evidence to show that these two components of the globules, wall and contents, which probably constitute their essential elements, are two different substances which become dissolved in the cerebro-spinal fluid, and are of great importance in the formation, nutrition and function of the central nervous system. The secretion of the globules is abundant in intra-foetal life (in man from the third to the seventh month), and gradually diminished afterwards with age. At the same time the choroid epithelium undergoes a slow evolution, which manifests itself especially by a granular fatty degeneration, most pronounced in the plexus of the old man.

From birth onwards there is deposited in the protoplasm of the epithelial cell and in the tissue between epithelium and blood-vessels granules of fatty acids or droplets of special fats (frog, tortoise, rabbit) or soaps, calcium salts, lecithin, lipochromes, etc. These are waste products derived from the cerebro-spinal fluid, and probably resulting from functioning of the central nervous system. The largest and most varied accumulation occurs in man. In severe acute experimental intoxications and after cerebral decortication (and physiologically in the latter half of pregnancy) the deposit of fatty acids and fat in the epithelium and vascular walls increases.

The choroid plexuses of the fourth ventricle assume the features of the adult choroid epithelium, and present a large quantity of fatty acid granules sooner than those of the lateral ventricles. Injections of alkalis increase the secretion of the globules into the cerebro-spinal fluid. Acids have an opposite effect. Secretion of globules is also favoured by making an occipito-atlantoid fistula.

There is reason to believe that the cerebro-spinal fluid is formed in great part of transuded lymph. The secretory globules introduce into it special substances of immense importance for the specific biological function. Total extirpation of the plexuses in the frog gives rise to a state of torpor. In severe and acute intoxications in cerebral decortication, in various experimental and natural pathological conditions in the rabbit, guinea-pig, dog, and in man, there are to be seen typical cells (Abraümzellen) containing granules of fatty acids, fat, detritus of tissue, globoplasts and initial globules in various stages of destruction. These cells, like the granular cells, are very probably hæmatogenous in origin. Mast cells are numerous in the plexuses, especially during foetal life, and in severe intoxications as well as experimental and pathological lesions.

The fresh method of staining with *Nilblau* was found to give the best results in this study.

J. H. MACDONALD.

The Influence of Alcohol on the Movements of the Brain [*L'influenza dell'alcool sui movimenti del cervello*]. (*Ann. di Neurol., anno xxix, fasc. 3, 1911.*) Bianchi, V.

Dr. Bianchi, who has already published some valuable researches regarding the action of alcohol on the circulation, records in this

paper, which bears the sub-title, "A Contribution to the *Ætiology of Epilepsy*," a series of observations on the influence of the drug on the pulsations of the brain. The observations were made on a youth *æt.* 18, who suffered from traumatic epilepsy, and had had a large part of one parietal bone removed by operation. A sheet of lead-foil placed over the aperture in the skull and fixed at the edges with putty formed a flexible diaphragm, the movements of which, corresponding to the cerebral pulsations, could be recorded by means of a Marey's tambour. Doses of ethylic alcohol varying from a minimum of 10 grm. to a maximum of 100 grm., in dilutions of 10-15 *per cent.*, were administered to the patient, and the resultant changes in the tracings observed. Very small doses failed to produce any clearly marked effect, but with doses of 15 grm. definite modifications were noted within five minutes, and with larger quantities of alcohol increasingly distinct and persistent results were observed. These latter results show sufficient resemblance in type to those produced by the smaller doses to indicate, in the author's opinion, a definite and characteristic mode of reaction to alcohol. This reaction depends on two factors, the effect of the drug on the heart and its effect on the cerebral blood-vessels, and is shown in rapid modifications of volume in the cephalic mass, disorder of the pulse rhythm, and alterations of hyper- and hypo-tonicity in the vessels of the brain. The tracings which most clearly exhibit these characteristics, such tracings as are obtained, for instance, after two doses of 50 grm., given with an interval of two hours, show a very striking similarity with the tracings described by several authors (Todorsky, Capriati, D'Ormea, Collucci) who have studied the condition of the cerebral circulation during the epileptic attack. Without wishing to press the argument from this resemblance too far, the author suggests that it is deserving of note in connection with the many other facts which point to a community of character in the cerebral condition in epilepsy and in alcoholism. As specially bearing on this point, reference is made to the clinical evidence of the importance of parental alcoholism in the *ætiology of epilepsy*.

W. C. SULLIVAN.

Investigation of the Colloid Substance of the Urine of Epileptics and Insane Persons [*Untersuchungen über die Harnkolloide von Epileptikern und Geisteskranken*]. (*Zeitschr. f. d. gesamte Neurol. u. Psych.*, vol. vii, No. 1.) Loewe, S.

Following on the premiss that epilepsy may be caused variously by disturbances toxogenetic and purely chemical or by those merely local and mechanical, the question arises—"Are there cases of epilepsy in which blood-changes are the cause of the epileptic seizure?" Assuming that this is so, Dr. Loewe has made interesting experiments on the urine of epileptics, paralytics, etc.

The method of analysing the urine is that suggested by Hofmeister, who has pointed out that although normal urine contains toxins, these are only found in a minimum degree in the colloid substances separated by dialysation. It is also shown that toxins appear in the colloid substances under numerous pathological conditions, such as pneumonia, eclampsia, uræmia, etc., and that these toxins differ from the toxin

found in a slight degree under normal conditions not only quantitatively but qualitatively.

Dr. Loewe very clearly demonstrates by his experiments that there is a remarkable increase of the colloid substances in the urine of epileptics. This increase varies, and it is especially great at the time of the epileptic seizure, sometimes even attaining to 5.5 c.cg. in the day. It is accompanied by an increase of toxins in the form of colloid phosphoric combinations, which, however, are generally only present after a seizure. Increase of the colloid substances is also found in cases of catatonia, hebephrenia, general paralysis, and delirium tremens. It is most pronounced in catatonia. In general paralysis it is only found after epileptiform attacks. But there is no phosphorus colloid substance corresponding to the increase of colloid substances as in epilepsy; although there is a high toxicity in catatonia, paranoic dementia, general paralysis and delirium tremens.

Experiments to the number of 150 were made by injecting intravenously solutions of the colloid substances taken from the urine of epileptics, insane and normal persons, into guinea-pigs and rabbits.

The injections taken from the urine of epileptics from one to five days after the seizure produced in many cases typical epileptic seizures, generally followed by death in a typical position. Colloid substances taken from the urine of persons suffering from the insanities noted above, and injected into guinea-pigs and rabbits, acted variously, generally causing death. The toxin in these cases, being materially different from that found in epilepsy, did not assert itself in epileptiform symptoms. The solutions taken from normal urine produced no reaction.

HAMILTON MARR.

The Mechanism of Injuries to the Cervical Spinal Cord [Zur Mechanismus der Verletzungen des Halsmarkes]. (Jahrbuch. f. Psych. u. Neurol., xxxii, No. 3.) Fuchs, A., and Schacherl, M.

The case of a female suffering from two wounds in the neck is described to prove that injury to the medulla spinalis may possibly occur without damage to the vertebral column.

HAMILTON MARR.

2. Ætiology of Insanity.

- (a) *The Study of Human Heredity*; (b) *The Heredity of Feeble-Mindedness. (Two bulletins issued by the Eugenics Record Office, Cold Spring Harbour, N.Z., May, 1911.)*

The first of the above papers gives an account of the method of collecting and recording the facts necessary for the study of the heredity of mental disease which has recently been adopted in America.

The chief modification in the method of collecting data consists in the employment of a "field worker" to supplement the usual interrogation of the patient and the inquiry by means of a form to be filled up by the relatives. The "field worker" is preferably a woman. Her

function is to visit all the relatives of the patient, the family physician, and any other person who can give information about any member of the family as far back as it can be traced.

An attempt is made to obtain a detailed life-history of every such member of the family, including a description of the mental and physical state, habits, illnesses, and cause of death.

The "field worker" is armed with all previously acquired information and interviews the patient just before visiting the friends. She is given explicit instructions as to the particulars to be elicited, but uses no printed form in noting them. Where relatives exist in localities worked by other investigators she is expected to record their addresses for the use of the latter. Several visits are generally found necessary to complete the pedigree. The "field worker" is also found useful as a means of keeping in touch with discharged patients and of discovering other individuals who require care. Every attempt is made to establish a friendly footing with the patients' relatives and apparently with success in America. The investigator is instructed in the Mendelian rules of heredity that this understanding may direct inquiries, but she is warned against being biased in the collection of facts by any knowledge of what is expected. The paper includes a brief statement of the Mendelian rules for the transmission of simple unit characters.

The method of recording data which is described includes a mode of charting recommended by a committee of the American Association for the Study of the Feeble-minded. It is one which enables the clear expression by means of symbols of practically all the points of importance about every discoverable member of the family.

The second of the papers mentioned above is an example of the application of these methods to the study of the transmission of feeble-mindedness. It includes fifteen pedigrees of patients admitted to the training school at Vineland, N.Z. Each pedigree records the presence or absence of feeble-mindedness and allied traits in every member of all branches of the family for three, four, or even five generations.

Such pedigrees naturally involve an enormous amount of labour in collection, and this is only a preliminary report. No statement is made as to the standard adopted in labelling individuals as feeble-minded. The pedigrees are presented without analysis to determine how far the transmission accords with Mendelian rules. In general they suggest that the defect behaves as a recessive to the normal state. To the reviewer, however, it appears that the mode of transmission in a few instances is incompatible with this simple formula. In order to include others within it it would be necessary to make assumptions for which there is no evidence without the history of a generation either preceding or succeeding those actually investigated.

EDWARD MAPOTHER.

3. Clinical Psychiatry.

Amnesia in General Paralysis [L'Amnesia dans la Paralyse Generale].
(*Gaz. des Hôp.*, Aug. 5th.) Benon, M. R.

This paper consists of a discussion of the fundamental characters of

the amnesia of general paralysis of a special character according to the stage and type of the disease, and of its diagnostic significance.

In the first place, the fundamental characters of the amnesia in this disease are stated as follows : It is both anterograde and retrograde, *i.e.*, the defect is seen in regard to events both subsequent and prior to the onset of the disease. All the functions of memory are affected. There is weakening of the capacity to register fresh impressions and instantaneous amnesia may be seen. The process of revival of memories is retarded or lost. The power of attributing to recollected events their proper setting in time and place is also impaired. The enfeeblement of memory is diffuse, though not necessarily profound in the early stages. It shows no tendency to systematisation. The amnesia is not exclusively for the events of a certain period of the patient's life, nor for a series of associated events. It does not especially effect acquirements of a certain area, *e.g.*, professional or scholastic, nor is there any evidence that memories of one type, such as visual or auditory, are picked out. Further, the enfeeblement is progressive. A striking feature is the indifference of the patient to his own amnesia, and such indifference is very suggestive of general paralysis.

In the second place, the author describes at length the characters of the amnesia at different periods in the evolution of the disease.

It is, as a rule, one of the earliest signs, and during its onset amnesia having the characters described can generally be found. The forgetfulness may not be very obvious and may fail to attract the notice of unobservant relatives. It generally first becomes noticeable in business relations, especially where the occupation is an intellectual one. The author believes that much of the eccentricity of conduct in the early stages of general paralysis is referable to amnesia, though defect of judgment and emotional indifference are accessory factors. In this stage there may also occur attacks of definite dissociation. Such attacks generally last a few hours or days but may be prolonged even for months.

As the disease progresses one observes an increase in the number and simplicity of the facts which the patient has forgotten. When questioned he answers quickly and at random. If he gives an occasional correct answer, it is impossible to get him to elaborate his statement. The date of birth and name of birthplace are usually among the last facts to be forgotten.

In the terminal stage, memory may be said to have disappeared. The patient barely recognises his most intimate acquaintances. He fails to understand the meaning of questions.

During remissions, the amnesia of the general paralytic becomes much less obvious, but does not lose its essential characters. Lapses of memory still occur ; they do not worry the patient in the least. Moreover, if one reminds him of misdemeanours committed during his period of more marked impairment, he either denies them vigorously or exhibits extreme indifference. The author concludes that complete remission of mental symptoms does not occur.

Amnesia having the general characters described above is to be found in all types of general paralysis. Where melancholia, excitement, exalted delusions, or seizures (either epileptiform or apoplectiform)

constitute the dominant feature of the clinical picture, this amnesia may be determined, and it serves to distinguish general paralysis from the numerous conditions with which it may be confused. It is particularly useful in serving to discriminate from general paralysis other psychoses associated with tabes.

The amnesia of localised organic lesions (*e.g.*, syphilitic) is mainly distinguished from that of general paralysis by the attitude of the patient towards his own defect. He is generally unaware of its existence until his attention is called to it—though this is not always the case as in general paralysis. But then one finds that he is intensely worried by his defect, struggles to recollect, concentrating his attention upon a question and evincing obvious satisfaction or depression according to his success or failure. He also frequently takes precautions to obviate the results of his forgetfulness after recognising it.

The amnesia in such conditions is also frequently lacunar rather than general, and is often less marked after mental rest.

The author concludes that the amnesia of general paralysis presents in itself nothing absolutely pathognomonic, but that with the disorders of judgment and of emotion it constitutes a mental state which is of greater diagnostic significance than physical signs in difficult cases.

EDWARD MAPOTHER.

A Case of Tubercular General Paralysis [Un cas de paralysie générale tuberculeuse]. (Bull. Soc. Clin. Méd. Ment., Dec., 1910.) Pactet et Vigouroux.

This paper records the pathological findings in a case previously exhibited before the Clinical Society. It was that of a youth, *æt.* 20, who had suffered from a typical progressive paralysis since the age of fourteen. He was demented, with unequal pupils, the light reflex being abolished, increased knee-jerks, hesitant speech and uncertain gait. Lumbar puncture revealed no lymphocytosis, and at no time had he any seizures. There was no history of syphilis either in the patient or his parents. He had, however, a tubercular family history, and had suffered from suppurating tubercular glands in legs, neck, etc. His death was due to acute pulmonary tuberculosis.

His brain showed the degenerative rather than the inflammatory changes found in general paralysis. There were no local brain lesions. The membranes were thickened and milky, but not adherent. There were no granulations of the ventricular ependyma. The vessels were little affected, but the perivascular spaces were dilated, and contained albuminous fluid with few cells. There was some hyaline degeneration of the smaller vessels. The cells were much altered in all parts of the brain. The chief alteration was a pigmentary degeneration. The neuroglia was proliferated, and spider-cells were numerous.

The authors look on this as a typical case of the variety of general paralysis due to tubercle, as differentiated by Klippel. The paper is illustrated by two plates.

W. STARKEY.

Conjugal Syphilis with General Paralysis and Tabes in Husband and Wife. (*Bull. Soc. Clin. Méd. Ment.*, May, 1910.) Leroy. (*Idem*, November, 1910.) Bonhomme.

Of late years numerous cases have been recorded in which the occurrence of syphilis in husband or wife has been followed by general paralysis or tabes in both. No stronger evidence could be advanced in favour of the view that syphilis is the essential factor in the production of these diseases.

Dr. Leroy's paper deals with the case of a married couple, previously healthy, of whom the husband acquired syphilis at the age of thirty-one. Both he and his wife were vigorously treated by Fournier, and had a healthy child five years later. Eight and a half years after infection the man developed a rapid form of tabes, with all the classical symptoms. Two years later the wife showed signs of general paralysis of the demented type, with tremor, pupillary signs, increased knee-jerks and speech defects. The woman had been considered rather weak-minded originally, and the writer suggests that this fact may have predisposed her to this disease rather than to tabes. He is also in favour of the view that a special neuro-toxic strain of syphilis exists, and adduces the analogy of the ordinary pyogenic staphylococcus, which, if taken from a suppurating joint and passed through a series of animals, only gives rise to joint infections.

Dr. Bonhomme records two groups of cases of a similar kind. In the first, the husband had a chancre four years before marriage, and developed general paralysis twenty years later. His wife bore him four children, of whom the first died at one month, the others were healthy. She became tabetic sixteen years after marriage. In the second case the man developed general paralysis thirty years after infection; his wife had no children, and had no suspicion that she was infected, yet she showed well-marked signs of tertiary syphilis when examined. As a pendant to this paper, Dr. Marie mentions that the history of a pair of conjugal general paralytics, which he recorded a year ago, has recently been completed by the admission to his asylum of their daughter as a case of juvenile general paralysis with well-marked signs of hereditary syphilis.

W. STARKEY.

Psychopathic Pains [Des Différents Espèces de Douleurs Psychopathiques]. (*L'Encéphale*, Sept. 10th, 1911.) Maillard, etc.

A discussion on this question was introduced by Maillard at the Amiens Congress of French Alienists and Neurologists last August. A psychopathic pain is symptomatic of an abnormal psychic state, whether it is altogether formed in the psychic organism or whether it is manifested as a disproportioned reaction to an insignificant irritation. Maillard divides psychopathic pains into four groups: (1) *Hallucinatory*, the pathological element here being the hallucination and not the pain; the intoxications and systematised persecution cases furnish classical types. (2) *Mythomaniac*, recognised in the first place by their exaggeration and discordance in relation to the assigned cause, also by the mode of appearance and evolution; auto-suggestion (as in the hysterical) presides over the genesis of the pains, which by force of attention and

emotion may become real fixed ideas. (3) *Paranoic*, essentially caused by insane interpretations, sensations not normally painful becoming pains through false interpretation ; such pain must be distinguished from those of the first class. (4) *Cœnæsthopathic*, first differentiated by Dupré and Camus ; these are strange and vague sensations due to disturbed cœnæsthetic sensibility, independently of any change in the sensorial organs, and they give rise to anxious, obsessive, or hypochondriacal states, which may even lead to suicide. In diagnosing psychopathic pains it is necessary to exclude simulation and to ascertain the presence, if any, of actual organic lesions.

Picqué, on the basis of his experience of the surgery of the insane, referred to the fact that in some cases the removal of a physical affection aggravates the insane state, while in other cases it removes it. He would refrain from attempts to classify psychopathic pains, and only preserve the cœnæsthopathic group, pointing out the difficulties of diagnosis. In regard to surgical treatment, he insisted on extreme circumspection. In some cases, it is true, surgical intervention is necessary and urgent ; but in a large number of cases the indications for operation are opposed by psychic counter-indications. To operate may merely be to prepare an enlarged field for post-operative insanity to flourish in. Even in the case of many desirable operations it may be necessary to abstain.

Dupouy would classify psychopathic pains in two groups : (1) in which the psychopathic state merely increases the susceptibility to pain ; and (2) in which, by some intermediary path, it creates an abnormal excitation.

Léri insisted on the distinction between the pain, which is a non-intellectual phenomenon, and the interpretation of the pain, which alone is the central element, while Binet-Sanglé discussed the question of the anatomical basis of pain.

Rayneau emphasised the influence of auto-suggestion, of exaggerated attention, and of emotion in creating psychopathic pains, mentioning the case of a patient who while sewing at a table dropped her thread, and in stooping to pick it up almost knocked her eye against the edge of the table ; the thought that she had narrowly escaped really striking her eye, and so perhaps blinding herself, set up a violent pain in the eye lasting for over two hours.

Blondel spoke of the difficulty in ascertaining in some cases when a pain began to be psychopathic and when its interpretation began to be insane, referring to a case in which the menopause was combined with arterio-sclerosis and ideas that were at times clearly of an insane and hypochondriacal kind.

In summing up the discussion, Maillard stated that he fully shared the views of Picqué in regard to operation, but that in some kinds of psychopathic pain, notably in those of minor mythomania, the suppression of any organic cause was absolutely essential. He was opposed to any simulated operation in healthy subjects carried out in the chimerical hope of modifying the mental state.

HAVELOCK ELLIS.

States of Anxiety [*Les États Anxieux*]. (*Bull. de la Soc. de Méd. Ment. de Belg.*, Aug.-Oct., 1911.) *Famenne and Hartenberg.*

After an elaborate disussion, in which he considers (1) history and definition, (2) ætiology and pathology, (3) symptomatology, (4) mechanism, hypotheses and theories, (5) therapy of the states of anxiety, Famenne draws the following *conclusions*: (1) The state of anxiety, whose intimate mechanism is still unknown, is a consciousness, more or less definite, of a real disorder of the respiratory and circulatory functions. It is a syndrome characterised both by mental symptoms and by physical signs. It does not occur in isolation, but always in close association with other maladies, such as neurasthenia, psychasthenia, and manic-depressive insanity; or with other organic troubles resulting from trauma or from violent emotion. (2) There is no such entity as the "anxiety neurosis," as we learn from a study of the ætiology, the symptoms, and the course of the affections under consideration. (3) The state of anxiety plays the leading part among the auto-suggestions which give rise (owing to a special susceptibility of the central nervous system, and to the action on these centres of certain peculiar stimuli) to the obsessions and the phobias. (4) The treatment of the state of anxiety should be both psycho-therapeutic and medicinal, and by appropriate measures we can often effect a cure not only of the state of anxiety itself, but also of the condition of psychasthenia to which that state has given rise.

Famenne goes on to state the following *problems*: (1) Are there any data which may throw light on the reasons why states of anxiety supervene in certain cases and not in others, although in all these cases alike we have to do with emotional subjects? (2) What is the organic basis of the state of anxiety? How do these disturbances differ from those which exist when emotion is unaccompanied by anxiety? (3) Are there any reasons for believing that states of anxiety arise from a neurosis of the great sympathetic, and that they are localised in this region of the nervous system? (4) What part is played by the state of anxiety in auto-suggestion, and especially in the traumatic neuroses? (5) What part is played by the state of anxiety in the causation of psychoses?

Hartenberg's conclusions are summarised as follows: (1) We may assert that states of anxiety are merely exaggerations, the cause of which remains obscure, of the emotional anxiety of perfectly normal persons. (2) Such states are of three degrees of intensity—uneasiness, anxiety, anguish. (3) The state of anxiety appears to be the indispensable pre-condition of certain neuropathic disorders which are always secondary to these states, *viz.*, phobias, impulsions, and manias of anxiety, *folie de doute* and *folie de scrupule*; divers obsessions, anxious auto-suggestions. (4) The state of anxiety is to be regarded as a psycho-neuropathic syndrome, sometimes congenital, but sometimes acquired (Freud's anxiety-neurosis); sometimes isolated, sometimes complicated by neurasthenia, melancholia, and various psychoses. (5) We are not justified in regarding either the anxiety-neurosis or psychasthenia as constituting an independent morbid entity.

M. EDEN PAUL.

Echolalic Speech in an Epileptic Imbecile [*Forme écholalique du langage chez un imbécile épileptique*]. (*Journ. de Psychol. norm. et pathol.*, Sept.-Oct., 1911.) Wallon, Henri.

The subject of this study is an epileptic imbecile, æt. 14. The speech was the special feature of interest. The response to questions consisted of simple repetitions or repetitions together with a response, showing perseveration and stereotypy; e.g., asked: "Have you slept well?"; the reply was, "Have you slept well? Say, yes, sir." The last three words are obviously a literal repetition of each of the words which had previously been addressed to him. In spontaneous speech he always used the interrogation, the imperative and reply. Thus, in complaining of headache, says, "Have you a headache? Say, yes, sir." The notion of personality was imperfectly developed, the patient regarding himself entirely objectively.

The explanation of the phenomena is to be found in the normal psychic evolution of children. Echolalia is normal and necessary, manifesting itself in the period intermediate between the first attempt at articulation and the complete development of speech. The transition from pure echolalia to useful speech can in many cases easily be traced. It is thus a primitive function, an initial condition of language, natural and spontaneous. Together with an imperfect evolution of the notion of personality it signifies merely an arrest of development at a particular stage.

H. DEVINE.

Fabulation and Chronic Systematised Delusional Insanity [*Fabulation et délire systématisé chronique*]. (*Gazette des Hôpitaux*, Sept. 19th, 21st.) Gonnet, A.

Delusions in chronic paranoid conditions, evolving without intellectual enfeeblement, develop in two ways. On the one hand are delusions of interpretation, and on the other delusions of purely imaginative origin. The former are analogous to normal beliefs, and develop naturally from a pre-existing emotional bias. They depend on an erroneous interpretation of actual facts, and are not abnormal from the absence of the usual processes of logical thought, but from the excessive partiality which intervenes in the admission of the arguments. In addition to such delusions, ideas of a purely imaginative character may always be observed—such ideas being accepted without any semblance of basing them on actual facts. The most interesting variety of imaginative conceptions are those which present themselves under the form of *fabulation*. This consists of not only affirming general ideas, but precise facts, which are told us by an eye-witness.

The fabulations may be free from all association with actual facts (*délire d'imagination, délire de fabulation*), or in combination with interpretations or hallucinatory processes which they amplify or distort.

In the former case, expansive ideas tend to be more prominent, persecutory ideas tending to develop more by interpretation. Not only are they usually exalted in type, but they are produced with greater facility, unfettered by reality, are abundant, changing, multiple, and not confined to one theme. The systemisation is usually imperfect.

This variety of psychosis tends to occur more in women and individuals of imaginative temperament.

H. DEVINE.

A Case of Interpretational Paranoia with Fabulation, etc. [*Un cas de psychosis chronique à base d'interprétations, avec délire d'imagination et réactions revendicatrices*]. (*Rev. de Psych.*, March, 1911.)
De Fortuné and Hannard.

This paper gives the history of a paranoiac of the interpreting type who recently escaped from the asylum at Armentières after a residence of nine years. Previously he had been in several other asylums, from all of which he had made his escape. There was no family history of insanity, nor did he exhibit any degenerative stigmata. Signs of mental trouble were early shown; in fact, his mother thought that he had never reasoned correctly. At school he fancied his companions plotted against him, their most innocent remarks were read as insults. Later, as a medical student, he thought he was the victim of the jealousy of both students and professors on account of his superior attainments, for by this time he was distinctly exalted; he discovered cures for phthisis, apoplexy, etc., and wrote to prominent public men offering to sell his secrets. Their failure to respond to his wishes resulted in the development of persecutory ideas, and as he became threatening he was certified and sent to an asylum. After a few weeks he escaped, and from this time on his career was an extraordinary series of escapes from one asylum after another. His delusions were daily added to by misinterpretations of the most ordinary remarks heard or read by him. At no time did he seem to have suffered from hallucinations; but an important part in the evolution of his very complex system of delusions was played by illusions, fabulations, and pure inventions.

Sérieux and Capgras have drawn attention to the fact that in some paranoiacs the delusions are largely augmented by a morbid creative imagination; the subject forges proofs of the justice of his cause; there are true fabulations or falsifications of memory. The authors look on their case as an example of the combination of the delirium of interpretation and the delirium of revindication in the same subject. These are the two forms of paranoia described by Sérieux and Capgras in their classic work *Les folies raisonnantes*, and to which they think the term "paranoia" should be restricted.

W. STARKEY.

The Circulatory Function in Cases of Dementia Præcox [*La funzione circolatoria nei dementi precoci*]. (*Riv. Sper. di Fren.*, vol. xxxvii, Fasc. 3.) Lugiato, L., and Lavizzari, G. B.

This paper comprises a study of the relations between the state of development of the cardio-vascular apparatus and the functional capacity of the heart. In a former investigation, Lugiato found that in many cases of dementia præcox the left ventricle was relatively small in comparison with the other cardiac diameters. In addition, the total size was reduced in some. The arterial system was generally deficient; the radial pulse was ill-marked and difficulty was experienced in obtaining a sphygmographic tracing. The superficial veins were not very visible and the circulation in the extremities was notably torpid. The object of the present inquiry was to control these results and to determine whether a constitutional circulatory fault really exists in the subjects of dementia præcox, and if so whether it is related with a functional

deficiency. The method adopted was the following: The patient was put to bed in a quiet room, and after a lapse of time sufficient to ensure physical and psychical equilibrium, the blood-pressure in the right arm was registered by the Riva-Rocci sphygmomanometer. Shortly afterwards the pulse was counted. Each observer made a separate observation. An attendant then raised the lower limbs of the patient to an angle of about 110° with the body and the blood-pressure was again taken immediately. Next, after removal of the sphygmomanometer, the pulse was again counted. Thereafter the heart and blood-vessels were examined in the usual clinical manner. In estimating the area of the cardiac triangle, the method of De Giovanni was employed. The phenomenon of dermatography was investigated in the abdominal and dorsal regions, and the temperature in both right and left axillæ ascertained. In all thirty male and ten female patients and eighteen healthy persons of similar age were examined. The results may be briefly summarised thus: In six patients the arterial pressure showed little or no variation after the experiment and the pulse showed only slight variation. In twelve cases a slight increase of pressure not exceeding 5 mm. of mercury was registered and the pulse-rate was increased. In the remaining twenty-two cases an increase of over 5 mm. up to a maximum of 19 mm. was obtained, while the pulse-rate was distinctly increased. In the healthy controls, with one exception, an increase of blood-pressure was constant, ranging from a minimum of 5 mm. to a maximum of 27 mm., whilst the pulse-rate was almost always increased. On the whole, it would seem that in dementia præcox the cardiac reaction is less intense than in the healthy, and might indicate a slight deficiency in contractility of the myocardium. The objective examination of the heart showed the cardiac area to be normal or but slightly diminished. The apex-beat was hardly visible or palpable. Murmurs were audible in 25 per cent. The medium-sized and small arteries showed a certain thinness of their walls and a feeble pulsation. Cyanosis of the face and extremities and diminished visibility of the superficial veins were frequently observed, as was also the phenomenon of dermatography. The axillary temperature was always within physiological limits, but it was noteworthy that in the majority of cases the temperature on the left side was one or two decimals of Centigrade above that on the right. On the whole, one must conclude that the subjects of dementia præcox do not present grave anatomical or functional disturbances sufficient to differentiate them clearly from the normal, though they certainly present features indicative of a deficiency and torpidity of the circulatory function.

J. H. MACDONALD.

Hæmatological Researches in Alcoholism [*Ricerca ematologica nell'alcoholisms.*] (*Riv. Sper. di Fren.*, vol. xxxvii, fasc. 3.)
Gorrieri, A.

This is a contribution to the study of toxæmia in relation to mental affections. All the cases investigated were admitted into the asylum at Brescia suffering from acute alcoholic psychoses. At the commencement of the affection and at various stages of improvement the writer estimated the number of red corpuscles, the number of leucocytes, total and differential, the blood-pressure, the relation of the latter to the

pulse and respiration, the percentage of hæmoglobin, the osmotic pressure of the blood-serum (Beckmann's method), and the cell-resistance (method of Buck). The final conclusions were as follows: (1) The percentage of hæmoglobin is less than normal; the mean was 80 *per cent.* (2) The number of red cells is diminished; the mean was from 4 to 4½ millions. (3) The leucocytes show no noteworthy deviation from the normal in point of number, but during the acute phase a relative polynuclear neutrophil leucocytosis is constant, and gradually disappears as the patient improves. (4) The blood-pressure in alcoholics is above the normal. (5) No relation could be noted between blood-pressure, pulse, and respiration. (6) The cell-resistance is greatly diminished during the acute phase, but returns gradually to the normal as the patient improves physically and mentally. (7) The osmotic pressure of the blood-serum is slightly increased in alcoholism.

J. H. MACDONALD.

4. Treatment of Insanity.

Mania in a Recently Confined Woman; Curetting followed by Recovery [Accès maniaque survenu chez une femme récemment accouchée; Curettage suivi de guérison]. (Bull. Soc. Clin. Méd. Ment., March, 1911.) Picque, M.

This paper records the case of a woman, æt. 20, with unstable mental heredity, who was confined of a healthy child at full term on October 20th, 1910. She left the hospital eleven days later after a normal convalescence. Two days later she became maniacal, with hallucinations, delusions of persecution and insomnia. She was very agitated, and attempted to get through the window of her room to escape. On admission to the asylum she had a temperature of 104° and was highly maniacal. Examination showed that the uterus was enlarged and a foetid discharge was present. Curettage was performed and a large quantity of placental *débris* removed; the cavity was irrigated with peroxide of hydrogen and swabbed with creosoted glycerine. Improvement followed almost at once, the temperature falling and the patient becoming quiet. She was discharged recovered in two months' time.

There can be little doubt that the psychosis here was the direct result of the local infection, and while it is more usual to find acute confusional insanity associated with septic absorption, still mania does occasionally replace it, especially in puerperal and uræmic cases. Such a case emphasises the great importance of a thorough search for a septic focus and for prompt surgical interference, without which the patient is almost sure to die, or the psychosis to become chronic.

W. STARKEY.

The Treatment of General Paralysis with Sodium Nuclein [Über die Behandlung der progressiven Paralyse mit Natrium Nucleinicum.] (Arch. f. Psych. u. Nervenkrankh., vol. lxxxiv, No. 3.) Hussels, H.

"La paralysie musculaire chronique est un symptôme fâcheux, qui annonce l'incurabilité." This remark was made by Georget nearly a

century ago, and even at the present date it cannot well be contradicted. Numerous discoveries regarding the nature of this disease have, however, been arrived at, and among others of recent date the important fact has been reached that an increase of leucocytes is accompanied by the building of a complement, *i.e.*, when there is hyperleucocytosis there is at the same time an immunising process taking place. Is it not possible that to this process may be traced the supposed action of the serum injection of Robertson and others? Great results have been hoped for from treatment by mercury, arsenic and tuberculin, which have all been widely tested. Sodium nuclein, however, remains to be tried.

Nucleic acid is found in the cell nuclei bound by albumen to nuclein, and is, according to Stendel, a tetra-glyco-tetra-meta-phosphoric acid from the thymus, connected alternately with each of the nitrogenous products of decomposition—guanin, adenin, thymine and cytosin.

Sodium nuclein has been used by Fischer and Donath. The former used a 10 *per cent.* solution, and injected 5 gr. at intervals of from three to five days. He made up to thirty-two injections in each case. His results were as follows: The total number of patients treated was 32. Of these 8 had remissions, 3 recovered, and 4 died. Donath's experiments on 36 patients gave the following results: 13 recovered partially and were able to work, 11 were discharged as recovered; 11 were uninfluenced, and 1 died.

The chief action of the drug is to produce hyperleucocytosis.

The histories of five cases treated with sodium nuclein are given. Unfortunately they were not taken at early stages, and only in one case is there a marked influence for the better. The solution used was 2.5 *per cent.* sodium nuclein with 2.5 *per cent.* common salt. Each patient had seven injections in twenty-eight days. Rise of temperature and increase of leucocytes occurred in every case. The temperatures rose as high as 40.3. The leucocytes increased to 21,400. The greatest increase was 150 *per cent.*, and the least, 60 *per cent.* The rise of temperature was highest from six to eight hours after the injection. After eighteen hours it fell noticeably, and considerably after twenty-four hours, when it rose again for a period and did not become normal until the fourth day. Hyperleucocytosis was greater after twelve hours than after six, and after eighteen than after twelve. It began to decrease after twenty-four hours, and was completely reduced after four days.

The five cases are described in detail. The four first, being in the last stages of the disease, were not influenced. The fifth, whose condition was near the terminal stage, was improved mentally and physically. His symptoms pointed to the release of toxic products from the body. Tachycardia disappeared and the blood-pressure became normal.

HAMILTON MARR.

Nutritive Enemata. (Bull. de la Soc. de Méd. Ment. de Belg., Dec., 1910.)
Cuyllits.

After an account of the history of nutritive enemata (which goes back to the days of Celsus) and a mention of the classes of cases in which they have been recommended, the writer goes on to say that their

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action may be considered from three different points of view—their psychic effect, their stimulating effect, their nutritive effect. The *psychic* influence of nutritive enemata is incontestable, and is familiar to all who have ordered their administration. To produce this effect, two conditions must be fulfilled: the enema must be retained, and it must contain substances which the patient believes to be nutritive. Hence it is that the utterly unscientific nutritive enema of eggs and milk is still so frequently administered, and continues to work wonders. The *stimulating* effect of a nutritive enema containing alcohol is equally certain. The concentration of the alcohol should not exceed 10 *per cent.*, and somewhat less than this is preferable (10 *per cent.* is the alcoholic strength of good claret). The writer considers the use of alcohol *per rectum* especially valuable in dealing with persons in need of a stimulant who have conscientious objections to taking alcohol by mouth. When we come to consider the third use of “nutritive enemata,” for their truly *nutritive* effect, we are at once faced with the difficulty that the anatomical structure of the large intestine shows that its function is not to absorb, but to evacuate. Still, experiment shows that, after all, the large intestine has certain powers of absorption. *Water* is absorbed very rapidly, its absorption from the large intestine being the more rapid in proportion to the degree of thirst; as much as a pint of water has been absorbed in ten minutes. *Sodium chloride* is freely absorbed, and favours the absorption of other substances, provided it is present in solution of a strength not exceeding 1 *per cent.* *Sugars* are absorbed, provided the quantity in solution does not exceed 10 *per cent.*, glucose and saccharose being absorbed more readily than lactose. The *starches* and *dextrine*, being practically inabsorbable from the large intestine, are inadmissible in nutritive enemata. *Fats* are in the same category. It is as regards the absorption of *proteids* that there has been the greatest diversity of opinion. It is now definitely agreed that coagulated albumen is not absorbed. At the other extremity of the proteid-scale lie the peptones; of these, Ewald and other authorities tell us that they are absorbed, “if the intestine tolerates them”—but usually it does not tolerate them. These considerations will show why, of the “classical” nutritive enema of five or six ounces of milk, a raw egg, and sugar, not enough will be absorbed in the course of nine hours to correspond to the nutritive contents of one ounce of milk. In addition, such enemata commonly prove extremely irritant. The conclusions which the author finally deduces from his study are the following: (1) The optimum temperature for a nutritive enema is a little above blood-heat—about 104° F. (2) The solution should be isotonic with the blood, *i.e.*, should contain about 1 *per cent.* of salt; this favours absorption. (3) The quantity of sugar should be from 10 to 15 *per cent.* (4) It is absolutely essential that the enema should be retained from one to two hours. Absorption is most active during the first hour. After two hours fermentation and putrefaction predominate. (5) Therefore, two hours after the nutritive enema, an evacuant enema should be given. (6) The addition of laudanum is undesirable. Its action being central rather than peripheral, by the time the drug could have any effect absorption will be far advanced. (7) The usual quantity of fluid administered in a nutritive enema is five to ten ounces, containing 5 to

10 *per cent.* of alcohol, 10 to 18 *per cent.* of ordinary sugar, and 1 *per cent.* of common salt, at a temperature of 104° F.

M. EDEN PAUL.

5. Sociology.

Some Methods of Restraint applied to the Insane in Morocco [*Sur quelques Moyens de Contrainte appliqués aux Aliénés au Maroc*]. (*Rev. de Psychiat.* May, 1911.) *Lwoff and Sérieux.* (Translated by Dr. M. A. Collins.)

The treatment of mental diseases is, so to speak, non-existent in Morocco. The fault is not due to any antipathy between Islam and the medical treatment of the insane, but solely to the condition of profound decadence which has been developing for a long time in Morocco. Medical care is absent in that country, and the treatment of diseases of all kinds is confined to the application of the talisman, invocations, prayers, and the empirical use of some drugs, etc.

The French Government has instituted dispensaries and hospitals in the principal towns, under the direction of French doctors. Neither the fear of strangers nor religious differences have prevented the natives (both male and female) from coming in by hundreds to ask for medical and surgical treatment. The day will come when the Mussulmans of Morocco will have the insane cared for in properly managed asylums.

Our inquiry was made, thanks to the intervention of Regnault, French Minister at Tangier, M. de Billey de BeauMarchais, and of M. Gallaird, Consul at Fez, in the moristans and prisons of the principal towns of Morocco. As to our visits and the information we obtained in the most diverse conditions, we are able to state as follows :

(1) Those insane who are, or appear to be, harmless, are allowed to wander at liberty, beg in the streets, and sleep in the open air; they are clothed in rags, and even both men and women are met with in a state of complete nudity. Patients who have mystic ideas become, as in some other countries, objects of veneration by the crowd. They are those "holy men and women" living on the public roads, who have alone attracted the attention of travellers. Thus has arisen the fable current in Europe, that the lunatic in Mussulman countries is always considered a "holy" man. There is so little truth in this statement that we observed one day in Tangier, at the Socci (market), in open daylight, a dement publicly chased by a band of roughs, who were bullying him and throwing stones at him.

(2) When the inoffensive insane become troublesome or dangerous, the relatives are compelled to shut them up at home, where they are frequently tied up and ill-treated. It has happened that patients of this kind, badly supervised by their family, and who have become noisy, troublesome, and dangerous, have been shot dead by the neighbours.

(3) Those of the insane whose families refuse to keep them and are dangerous, are placed in the moristans and in the prisons. In the moristan, a kind of casual ward attached to the Mosques, is found a

mingled crowd of beggars, people suffering from fevers and contagious diseases and lunatics. No doctors visit these establishments. For purposes of economy the number of attendants is reduced to a strict minimum. There are about a hundred lunatics thus confined in Morocco, the remaining dangerous patients being placed in the prisons with the ordinary criminals. Those in charge know sometimes they are dealing with lunatics, but more often not. The most celebrated moristan in Morocco is at Fez, founded in the thirteenth century, to which no European had previously been admitted. The patients wear day and night a heavy iron collar formed of two semicircular bands joined by a kind of heavy hinge; the free ends, which are turned back at a right angle, are pierced with holes, which permit them to be joined by a ring to the end link of a heavy chain fixed to the other end of the wall. It is long enough to allow the patient to reach the door of his cell. One is not particularly astonished on entering the moristan to see a dozen or so of these patients at the door of their cells with their iron collars around their necks pulling with much force and noise to get as near as possible to the unusual visitors.

In the prison, the collar is reserved principally for night. Excited patients, like the criminals, wear fetters continuously. These fetters are formed of a thick sheet of heavy iron, pierced at each end with holes through which are spiral rings, which surround the ankles of the patients. These spiral rings are closed by a blacksmith with rivets. As the fetters only permit of the very smallest step to be taken, it is only with great difficulty that the patients can move about, and falls are frequent. The collars are used in the prisons by all at night.

We were able to be present at the bedding of the prisoners and lunatics at the prison of Laraiche. The Moroccan prison is a vast building, with four very high walls, no windows, and having as roof a strong iron grating. For each entrance there is an opening $1\frac{1}{2}$ metres high and 1 metre broad, and at a level of 1 metre from the ground. When a new prisoner arrives, the wooden shutter which forms the entrance is opened at a given signal, and the prisoner, raised by the feet, is pushed by the warders inside, where two vigorous hands pull him in by the shoulder. It is in the same way, with a little more tenderness, that important visitors are introduced. Inside is found a floor of earth; all round the walls, a ledge projecting 2 metres inwards acts as a shelter against the rain; it is under this cornice that prisoners sleep on the ground with a mat as their sole bedding.

As we entered the prison night was falling; two little smoking petroleum lamps (with no glass chimney), hanging by an iron wire, lighted the scene. In the middle of the prison we saw a pit, 16 metres deep, without protection; not far from this was an enormous heap of refuse and waste of all kinds; big rats were running about. An infectious odour from primitive w.c.'s separated by a single wooden screen was poisoning the air.

A quick order was given; all the prisoners seated themselves in oriental fashion on their mats along the walls (the wall with an opening along remaining free). Another guttural order and each prisoner seized an iron collar, put it round his neck, and closed it. A chain with

strong links, one end being fixed to the wall, was piled up in the corner of the prison. The prisoner next to the pile took hold of the free end of this chain, and passed it through the holes of his collar; he then handed it to his neighbour, who did likewise, passed it on to the next, and so on to all of them. In order not to be choked by the chain, the first one had to lift it, and thus allow it to pass easily through the rings of the collars. The chain made a gruesome noise as it ran through the collars binding into a sort of bunch all these human beings. Near the last prisoner a warder waited; he took hold of the chain as it passed the last collar and pushed it through a hole in the wall. Outside the chief warder fixed it with a solid padlock which would not be unfastened till the next morning. The prisoners then lay down on their mats; they were many quite close one to another, and the least movement pulled on the collar of the next one. It was only possible to change position by turning the body exactly on its own axis. The least lateral movement caused the chain to pull on the collar around the necks of those on either side. What happens when any physiological necessity arises?

As before remarked, they lay on the mats with no pillows, and as a covering they had nothing but their clothing, usually rags. They are not sheltered from the outside air, and the nights are often cold in Morocco. In the month of April, hoar frosts sometimes cover the ground in the morning. The feeding of the prisoners does nothing to make up for the want of warmth. Only a few privileged ones receive regularly two loaves per day and some water; to the others nothing is given except water and light. They live on what their relations bring them, and on gifts in kind sent sometimes to the prison by charitable people. They can sometimes earn a few sous by making baskets. These deplorable hygienic conditions explain fully the sallow tint and the thin emaciated appearance of the inmates. From the chief warder we learnt without surprise, but not without distress, that from time to time whole groups of these prisoners become suddenly ill, they seem to become feverish; "they shiver," said he, "diarrhoea appears and they die." One year they lost nine of them in fifteen days, the total number in the prison being about fifty. No doctor enters these prisons; the sick die unattended upon their mats alongside of their companions, to whom they are chained, suffering from hunger and cold without the consolation of their relations in their last moments. No register exists in the Morocco prisons; the chief warder often does not know how many prisoners he has (we had one experience which proved this conclusively). In Morocco people are condemned to prison without much ceremony; the term of imprisonment is not fixed, and prisoners remain therein till death unless reclaimed by relatives or powerful friends.

It is in such surroundings that the insane live, fettered and chained, and mixed with ordinary criminals, and usually not even recognised. In the course of one visit to the prison at Tangier, the most civilised town in Morocco, we were able, in a very short time, to discover a dozen unrecognised lunatics. One can easily imagine how many there are who drag out a miserable existence in the different prisons of Morocco. We visited the prisons of Tangier, of Laraiche, etc., and everywhere (except at Casablanca) the conditions were the same.

Medico-legal Report on a Case of Shop-Lifting [Vol à l'étalage, Rapport Médico-légal]. (Bull. de la Soc. de Méd. Ment. de Belg., June, 1911.) Lentz.

The interest of this case lies less in its clinical features, which are of a pretty ordinary kind, than in the fact that, on what seems to have been rather slight evidence of morbid causation, it should have been possible to obtain an acquittal on the ground of mental incapacity. Dr. Lentz's patient, whose age is not stated, was detected in the act of stealing some baby-linen from the counter of a large drapery store. She had been to the shop the previous day and had been noticed to act in a suspicious manner, and on the day of the offence she was consequently kept under surveillance; there was reason to think that she was aware of this fact. About two months previously she had stolen some other things from the same shop, and these articles were found unused in her room. These circumstances, in the opinion of the reporter, are of a kind to suggest that the offence was due to a kleptomaniac impulse. And he finds confirmation of this view in the woman's statement that at the moment of taking the things she had, together with palpitation and other symptoms of emotional excitement, a feeling "as if something was urging her on." The family history showed that several relatives had suffered from tuberculosis or from heart disease, or had been alcoholic, and that many of them had presented indications of rather excessive emotional instability. The patient herself was also considered to have shown all through her life an "ultra-nervous temperament," and this had been expressed recently by a general slackness and an incapacity for sustained exertion which had caused her to lose her employment as a shop assistant. There do not seem to have been any more definite indications of disease, nor does it appear that conscious impulses of a morbid sort had occurred on any previous occasion. On the ground, however, of the personal and family history of nervous instability, and in view of the fact that the woman was menstruating at the time of the offence, Dr. Lentz felt justified in concluding that she did not possess normal power of control over her impulses, especially when over-stimulated by the exciting influences which the mammoth shops of our day supply so plentifully. At the same time Dr. Lentz is prepared to admit that the patient was not wholly unaccountable, and he carries his adhesion to the doctrine of partial responsibility so far that he even gives a mathematical expression to his opinion, and asserts that the patient should be regarded as having a responsibility amounting to one-tenth of the normal. The reporter does not say how he arrived at this remarkably precise estimate. The court acquitted the woman.

W. C. SULLIVAN.

The Care of the Insane in the War Field [Über Krankensinnigenfürsorge im Felde]. (Jahrbucher f. Psych. u. Neurol., xxxiii, No. 3.) Albrecht, O.

Suggestions are made for improvements in the methods of caring for the insane in the Austrian army during war. There is at present no special provision for the treatment of the insane on the battle-field, and

Dr. Albrecht, who is an army surgeon, points out the danger of sudden outbreaks of insanity at such times. He advises that neurotic and weak-minded persons should not be allowed to enter the army. He points out that there is a marked increase of insanity among soldiers when they are engaged in war. In the Franco-German war there was an increase during the first half of the year 1870, and during the two following half years, of '37, '54, and '93 respectively. In the American army, during the Spanish-American war, the numbers rose from '8 to 2'7, and in the English army during the Boer war, from 1'5 to 2'6. In the war between Russia and Japan there was no provision made by the Japanese for the insane, and special arrangements had to be made during war to convey insane soldiers home. The numbers of insane were increased by 1½.

In countries where there is conscription the percentage of insane in the army is said to be small as compared with that of countries where enlistment is voluntary, e.g., in 1902 there was '8 of insane soldiers in the armies of Austria and Prussia, while in Great Britain there was 1'2.

To improve the arrangements of the Austrian army, Dr. Albrecht suggests that a special service of motor cars, with attendants, should be provided for conveying the insane from the battle-field, and that some arrangements should be made to provide accommodation for the insane on the west and south coasts of Austria, as the State asylums are for the most part on the north and east coasts.

He suggests that cases of insanity occurring on the battle-field should be treated with injections of hyoscine and placed in straight jackets.

HAMILTON MARR.

6. Asylum Reports.

Some English County and Borough Asylums.

County of London.—The lunacy under the immediate care of this authority does not show a tendency to advance by leaps and bounds as at one time it threatened to do. In fact, the increase for last year, though still a little larger than in the preceding year, is below the average annual increase for the last twenty years. The same is true of the total lunacy of London, that is, that which is contained by the asylums, is residing at home, in workhouses, and the Metropolitan Asylums Board institutions. The county has nearly overtaken the task of providing sufficient accommodation for its patients, but is prepared with the plans of yet an eleventh asylum. Some of the boards of guardians of parishes north of the Thames asked that this asylum should be built in their neighbourhood, but the committee has decided to occupy the land at Horton already hypothecated for the purpose. So Epsom will have yet another grievance and the accompanying pleasure of a further valuable rating basis.

The mental hospital identified with the generosity of Dr. Maudsley is at last under way, the site having been secured at Denmark Hill. The County propose to appropriate another £40,000 in addition to Dr. Maudsley's donation of £30,000. We feel sure that all of us will

wish the venture every success. We are not quite sure how it is proposed to staff the Hospital, whether general medicine or asylum practice will be predominant ; in the former case no doubt due regard will be paid to the incidence of responsibility of the patients. In former days some appeared to think that asylums and asylum doctors had been so wanting in success that it would be better not to have much to do with them and their works. But things have moved on since then. We are glad to think that our Association now contains as ardent workers and as clear and scientific thinkers as any other branch of the profession.

The Committee is still most desirous of obtaining another bit of experimental machinery—receiving houses. Apparently it has asked for too much, in so far that the county council will allow only one house instead of the two asked for. Here, too, our best wishes must follow the proposition. It is one that is adopted in other countries successfully, and, indeed, the germ of the idea already exists in the separate departments of several asylums in this country, for instance, Bexley, Hellingly, etc.

We think that the Committee has reason in calling on committing justices to consider the fact that the asylums were built for moving cases, the Metropolitan Board's institutions for the more harmless and chronic. At present, want of attention to this leads to the round peg being put into the square hole, and to accommodation suitable to one class being blocked up by the other class, all leading to inconvenience and waste of money.

The readmissions continue to be positively startling in their frequency. No less than 29 *per cent.* of the "recoveries" of the last sixteen years have found their way back, and 12 *per cent.* within twelve months of discharge ! Of course each recovery, if otherwise capable, may be the centre of further transmitted mental weakness under cover of matrimony or free love. The committee cites the case of a man who in his thirty-seven years of life has recovered thirteen times more or less. In his periodic vacations he has procreated five children—during the last eight years—all of whom are chargeable now to the rates, the wife occasionally availing herself of this patient milch-cow. Of course, everyone says that something must be done, and the Commission on the Feeble-Minded has shown how that thing can be and should be done, and responsible ministers have everything ready, when all fear of interfering with the liberty of the subject has been allayed. But the nation, though alert and ready to take action when evil actually threatens, is at heart an arrant humbug when it knows of, but does not actually see, organised danger. It was, and will be, the same with syphilis, drink and vaccination. Some political or social matter stands in the way, and we must think its possible influences out most carefully ; we must wait and see. So to-day that powerless machine which passes a budget of two hundred millions or so of money without a word of efficient criticism, will to-morrow prefer to spend all its time in squabbling over giving every man a vote, leaving to the Greek Kalends the question of giving the nation a chance of purging itself of needless misery, expense and degeneracy. We too, ourselves, can continue to prate of the knife and marriage oath, and we shall perforce have to

continue to prate of the dreadful effects of the liberty of every subject to pollute the stream of life, but we can add our voices, as experts, to the gathering storm of stern remonstrance, and we can take action in our own limited way. That action is contemplated we are glad to learn from the strong protest and resolution passed at the last meeting of the Council.

After such serious matter it is refreshing to read of a protest by certain guardians that the Committee's industry in bringing to book those friends of patients who can afford to pay their shot, seriously diminishes the commissions payable to the guardians' own officers on successfully discovering that ability. If we remember rightly the Committee's officers were only brought into being by the idea that the guardians' own officers were lax in inquiry. It is quite a case of negligence bringing its own deserved punishment. The Committee in addition points out that the direct payment of maintenance cost to it frees the patient from the imputation of paupery which follows payment through the guardians.

The Committee is to be congratulated, and if we may say so, warmly commended for the attitude which it has taken up in regard to the Superannuation Act. It felt that the officers who were in its service at the time of passing of the Act had joined with a clear hope of superannuation under the old provisions without contribution. Therefore additions have been made to wages and salaries to compensate the enforced contribution. So, too, with regard to the old outdoor staff, working by the hour, the payments have been made weekly, with a week's notice on either side, so as to bring them inside the Act. The year's contributions amounted to over £7,500 and the pensions paid to £1,600. The Committee, too, has acted with liberality to the full extent of the Act in regard to two cases where the pension was allowable, but death had intervened before its award. On legal advice it saw its way to allow to the widows liberal sums.

The Committee notes with words of warm approval the gaining of two Albert Medals of the Second Class by an attendant and a nurse for acts of splendid courage and devotion to duty. In each case the act consisted in following a patient on to lofty roofs and, at great peril, securing him or her. One can only wonder that any woman had the pluck to follow a patient over some wire netting and along sixty or seventy feet of open guttering at such a height.

On turning from the Committee's own report, we may once again congratulate it on its keen sense of what is right in the administration of the huge machine entrusted to its care.

In reference to the various asylums and their superintendents we note with congratulation the appointment of Dr. Spark to *Banstead*. He has commenced a systematic search for tuberculosis and has found a good deal of it.

At *Bexley* Dr. Stansfield draws attention to the considerable disparity in duration of attack on admission between the statistics of his asylum and those of the other asylums belonging to the Council. His rate for three months is 46 *per cent.* of the admissions, and for one year's duration 28 *per cent.*, against markedly lower ratios for the latter and higher for the former in the other asylums. He wonders whether this is due to

local delay in transmission, or to a difference in asylum compilation. General paralysis accounted for 18 *per cent.* of the male and 4 *per cent.* of the female direct admissions, while for the other admissions the male rate was 23 *per cent.* Positive evidences of syphilis were found in 88 *per cent.* of the male paralytics, and in 100 *per cent.* of the females. Examination of the cerebro-spinal fluid is a matter of routine in cases of doubtful diagnosis. Heredity was found in 66 *per cent.* of the admissions, there being a slight preponderance in the females. But heredity was assigned in only 23 *per cent.* of the recoveries. Other commonly assigned factors among the recoveries were alcohol, syphilis, mental stress and congenital defect. One must confess to some inability to appreciate truly the chances of any congenital defective recovering. Dr. Stansfield is firm in attributing to the Superannuation Act a steadying effect by conferring a sense of security leading to retention of office.

At *Claybury* we cannot follow Dr. Robert Jones when he says it "has become customary of late to speak of antecedents, factors, correlative determinants, or co-efficients, rather than of 'causes' of insanity, and this vogue has displaced alcohol as a 'cause' of insanity in the view of those accustomed to look for pathological findings." The official term used by the Association in its tables is "ætiological factor," which is cause under a different name, having some margin of non-committal. To say that one thing is the cause of another, unless the term is qualified by another term, such as contributory, rather tends to imply that it signifies an agency which by itself can and did bring about the assumed effect. But it is demonstrable that no case of insanity can be caused by one sole agency. Alcohol can still be a principal factor, and undoubtedly is so frequently. He finds that alcoholic heredity existed in a definite number of his alcoholics. Dr. Robert Jones speaks warmly, and justly so, of the beneficent work done by the After-Care Association. When legislation comes we must endeavour to secure that asylum committees can subscribe to it without being surcharged by the auditor. At present such a step is illegal. The After-Care Association, with all its ramifications, can make a pound of money go further and better than can a visiting committee. He received a case of leprosy from the West Indies. The use of the Turkish bath has been taken up and excellent results have followed the complete equipment in cases of the young stuporose and melancholic cases of both sexes. Some years ago a good deal was hoped for from this form of treatment, but we have seen but little record of its results of late. It will be interesting to hear further of Dr. Jones's energetic work in this direction. He adverts to the fact that the cost of the "rates," which was on the average of all Council Asylums 9'68d, amounted at *Claybury* to 1s. 2'09d.

At *Colney Hatch* Dr. Seward mentions a case of a young man who met with a bicycle accident shortly before admission, and soon developed general paralysis. This case has given rise to a medico-legal question as to the liability of his employers. One can imagine, too, that from a medical point of view there must be plenty of room for difference of scientific opinion. Dr. Seward is pushing the teaching of the higher trades, such as book-binding, with advantage. One cannot

but lament the tremendous amount of valuable labour which lies rotting in asylums for want of suitable provision for its employment. He is not quite sure as to the effect of the Superannuation Act in giving satisfaction to the staff. He especially mentions the required ten years' basis for calculation of the pension, pointing out that few, especially of the female staff, can expect to give such a long service to qualify them for their full rights. But, as is known, it is hoped that this evil will be remedied in an amending Act.

At *Horton*, Dr. Lord finds increasing signs of degeneracy in his admissions. They are more deluded and hallucinated than formerly. Many never have been of any good, have always been failures, and will continue to be such in their present home surroundings. It is becoming increasingly rare now to see the well-built strong man suffering from a pure psychosis, which responds fairly early to suitable treatment. More frequently he finds, to his disappointment, that, after active symptoms have been successfully met the normal state is one of mild congenital deficiency. He laments that his recovery-rate is not large, but he claims that from care taken the relapses are few in number. Adverting to the ill-effects of a patient's anxiety as to how the home is getting on without him or her, he mentions that in Italy there is a Society that not only exercises after-care, but keeps an eye on the home while the patient is under confinement. One would think that this might be a useful field of work for such a body as the Brabazon Society. He also warmly commends the After-Care Association, and links with it the British Women's Temperance Association and the Women's Total Abstinence Union. Requests from the staff for bacterio-therapeutism show its efficacy in meeting furuncular outbreaks. The *Bacillus bulgaricus* has been administered to "depressed cases" where indican in the urine has evidenced auto-intoxication, but no striking effects have followed.

At *Long Grove* Dr. Hubert Bond admitted still fewer congenitals, which only represented 1.9 *per cent.* of the admissions. The first-attack cases of acquired insanity were 75 *per cent.* of the total, while relapses accounted for the remainder. The greater liability in the female to relapse continues to be well marked. Of the male cases 20 *per cent.* had evidence or reliable history of syphilis, but the Wassermann test applied to doubtful cases of paralysis showed that that figure must be taken as approximate only in estimating the full effects of the lues. He finds a notable increase in the association of trauma with the onset of mental disease, especially of injury to the head. This is almost always confined to the first-attack cases. In 1907 he found trauma in 2.6 of the direct first-attack cases. In 1910 the proportion has risen to 5.1. He draws attention in such cases to the many legal and medical questions which may arise to tax the time and thought of the Superintendent in connection with the Employers' Liability Act. He is extending investigation to the study of psychic trauma. In one-ninth of his paralytics he established insane or epileptic heredity, in other fifths he found alcoholic excess, and prolonged mental stress. One seldom hears now of the old assigned factor, venereal excess. The outdoor treatment of all tubercular cases by night, as well as by day, has been in operation for two years now

without any inconvenience. Dr. Barham has designed a special screen for use in the female hospital, which has been found to obviate largely the use of single rooms; and Dr. Clarke has designed some useful wooden beds for the single rooms on the male side. Arrangements have been made for the installation of hot baths, both of water and air, with a view to the adoption of continuous bathing as a mode of treatment. Dr. Bond chronicles the fact that Dr. Moll, who was awarded an extra Gaskell prize this year, was allowed to be a resident clinic. Also that a Swiss doctor resided in the neighbourhood for some weeks, and was allowed to attend the asylum daily for study. He hopes, with the sanction of the Committee, to have other clinics to foster research, and possibly to form a source whence future assistant medical officers can be recruited. As hitherto, every cow purchased is subjected to the tuberculin test, the result being that 33 *per cent.* of the candidates failed to pass their examination, and were referred to their owners.

At *The Manor*, Dr. Donaldson adverts to one case of successful deportation, in the person of an Italian lady, who subsequently made a good recovery and is now holding a responsible position as a professor of music in one of the principal cities on the Continent. He states that a new villa for 113 patients has been substantially built, completed and equipped at the cost of £95 per bed. This must surely be a record and it will give encouragement to other committees who fear capital expenditure in these days of excessive financial burden. It was designed by Mr. Clifford Smith, and thus no doubt heavy fees to the architect were saved.

At the *Epileptic Colony* we note the succession to the superintendency of Dr. Collins and congratulate him on the appointment. He states that the average age on admission of epileptics such as he admits is twenty-eight, which makes it almost certain that the disease is well established at the time; and he asserts that as a rule epileptics do not become certifiable until the degeneration has become marked. So that frequently if the fits are relieved the mental condition has not benefited; often the reverse is found. Consequently he finds that among thirty-seven males and seven females who have not had a fit for more than a year not one could justifiably be discharged. In this relation we wonder, on reading that three were discharged as recovered, whether the recovery attached both to the physical and mental disease, or whether the mind having recovered, the epilepsy, if continuing, was ignored. Dr. Collins gives a long and disheartening account of how this combination of disease is brought about by parental failure. In 107 cases of males where a certain history was obtained, alcoholism in the father was proved in 34, in the mother in 6, in both parents 4, in grandparents 11. Epilepsy has occurred parentally in 10, in brother or sister 19 times, in other relatives 7, and in 2 cases the patients have epileptic children. Dr. Collins mentions that of twenty men posted on the black list (locale of the list not stated), four were men of twenty-one years and under, the average height of whom was 5 ft. 2½ in.—degenerates.

The *Pathologist's report* by Dr. Mott chronicles a long list of recondite scientific work done and published or shortly to be published. The truth and reliability of the Wassermann test was absolutely proved

by *post-mortem* examination of many cases which had been subjected to it ante-mortem. Investigation was made into an outbreak of a rapidly fatal disease among the fowls at Long Grove. The organism found constantly in the blood suggested fowl cholera, but the lack of a licence for inoculations prevented accurate demonstration.

Heredity and insanity.—A great deal of time has been devoted to this subject, and one *very important fact* has been elucidated, *vis.*, the law of anticipation. Among the 2,246 relatives who are or have been resident in the London County Asylums there are 420 pairs of parent and offspring, but in only one case was the first attack in the offspring at a later age than that of the parent; thus there was "anticipation" or "ante-dating" in all the remainder. Indeed, in *51 per cent.* the first attack commenced before the age of twenty-five in the offspring, the result being that the majority of the insane offspring of insane parents are either congenital imbeciles or develop insanity in adolescence. Nature, by intensifying the mental disease, as it were, crystallises out the unsound elements of an insane stock, by developing the disease at an early age, thus preventing in a great measure the perpetuation of the taint. This fact explains why it is in pedigrees of insane stocks the insanity does not proceed as a rule beyond three generations. This and many other interesting points have been fully dealt with in the Huxley lecture on the hereditary aspect of nervous and mental disease, "Heredity and Insanity," an address to the Eugenics Society, and in the sixth lecture of a series on "Heredity" delivered at the Royal Institution. This investigation is still in progress, and a summary of the cases made on February 18th, 1911, shows that there are 2,246 cases who are or have been resident in the London County Asylums who are related as follows :

Instances of Two of a Family Insane.

	Pairs.	Cases.
Mother and daughter	111	222
" son	64	128
Father and daughter	72	144
" son	52	104
Brothers and sisters	163	326
Two sisters	159	318
Two brothers	105	210
Husband and wife	49	98
Other relationships, collaterals, etc.	138	276
Total	913	1,826

108 instances of 3 of a family insane	324
17 " 4 " "	68
3 " 5 " "	15
1 " 6 " "	6
1 " 7 " "	7
Total	2,246

Total—2,246 cases made up from 1,043 families.

Recently I have submitted to the relieving officers of the various parishes a list of questions relating to the incidence of insanity, pauperism, criminality, alcoholism, disease, etc., among the relatives of the insane residents of the London County Asylums. A number of returns have been made, some few of which have been sufficiently full and detailed to be of considerable value.

As the result of inquiry into the incidence of pulmonary tuberculosis in each and all of the asylums, Dr. Mott gives the subjoined percentages. He states that these ratios are pretty constant from year to year :

Showing Percentage of the Patients Resident in the London County Asylums on March 31st, 1911, Reported as Suffering from Pulmonary Tuberculosis.

	Banstead.		Bexley.		Cane Hill.		Claybury.		Colney Hatch.		Hanwell.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
No. of patients resident in asylums on March 31st, 1911 .	1079	1379	1115	1111	945	1231	1033	1448	957	1495	1009	1519
No. of cases reported as tuberculous resident in asylums on March 31st, 1911 .	22	42	24	24	13	16	30	61	23	27	10	39
Percentage of cases reported as tuberculous	2'04	3'04	2'15	2'16	1'37	1'30	2'90	4'21	2'40	1'80	0'99	2'56

	Horton.		Long Grove.		The Manor.		The Colony, Ewell.		Total.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M. and F.
No. of patients resident in asylums on March 31st, 1911 .	938	1163	1116	1011	65	974	271	60	8528	11391	19919
No. of cases reported as tuberculous resident in asylums on March 31st, 1911 .	23	16	18	18	—	5	1	1	164	249	413
Percentage of cases reported as tuberculous	2'45	1'37	1'61	1'78	—	0'51	0'36	1'66	1'92	2'18	2'07

These figures are of interest in so far that they largely discount the allegation made not so long ago that every old asylum is a factory of consumption. The oldest of the lot, Hanwell, can look the general average of 2'07 in the face with its own of 1'95. *Post-mortem* findings convey much the same idea. The *post-mortem* table, as usual, demonstrates a considerable number of inaccuracies in diagnosis, 50 in 1,555 autopsies showing disease that was not recognised in life, while in 16 cases the diagnosis during life of active disease was not supported. The fact, however, that the subjects are during life the most resistive and unsatisfactory of all patients leads one to conclude that these figures might well have been considerably greater had it not been for very great care in examination. The final result of *post-mortem* observation, added to ante-mortem examination, showed a death-rate from active

phthisis of 12·3 in each 1,000 living insane residents. The *colitis* returns show a slight increase, but on the whole they are more satisfactory since one-third came from Long Grove alone. As Dr. Mott points out, the peopling of a new asylum with transfers of chronics from others favours a high rate for the time. The same considerations apply to returns of diarrhoea, in which a small increase is mainly due to two batches from the same asylum from dietetic causes. On the whole there is improvement in this direction. These inquiries, besides being invaluable to the asylums affected, cannot fail to be of service to all others.

The *Engineer's report*, as usual, forms interesting reading to those who are chiefly concerned in the regulation of "necessaries." How close a watch is kept on items of coal, gas, water, and so forth is shown by the small increment in residence of patients and staff being reflected by similar small increases in the consumption. The consumption of water has indeed fallen; possibly this may be due to saving by the new form of bathing. In several ward sculleries gas-heated ovens have been substituted for coal-fired kitcheners. The actual cash results have not been computed yet, but in the meantime much benefit has been found from the absence of need to handle coal and ashes, particularly in the summer months. Mr. Clifford Smith points out that glazed-brick dados, as compared with plaster or plain brickwork, varnishing woodwork in place of painting it, broad passages, and teak for flooring in place of soft wood go a long way to keep down repair expense. This has to be borne in mind in comparing capital expense of one asylum with that of another. It is quite possible to put away a large amount of capital in remunerative methods such as the above, and earn a name for extravagance. *Crede experto.*

The Commissioners' reports contain nothing of special interest except that we feel bound to acknowledge the kindly way in which they recognise the personal endeavours of the medical officers everywhere. As we have already said more than once, this is right, and the due of those whose right-minded energy cannot be paid for solely in cash. Besides, such remarks betoken the existence of a common desire for the enthusiastic work that is outside the limits of ordinary duty.

The statistical tables.—Mr. Keene continues his annual examination into the huge series of figures presented by the various asylums, and he is most successful in drawing attention to many views that might not present themselves to casual readers. He is glad that at last the county is nearly able to house all its own patients, since this must needs tend to greater homogeneity of observation and record.

In his first comprehensive table, showing the movements of the population and the percentages relating to such movements, it is seen that the recoveries, the deaths and other removals are all falling in comparing the last year with the previous eighty years during which records are at all available. Compared with the previous ten years (1890–1899, inclusive) the last eleven years (1900–1910 inclusive) show that the recoveries have dwindled from 25·69 to 22·91. These figures, of course, relate to all cases, direct or otherwise. This serious fall is compensated from the accommodation point of view by an increase in the death-rate from 23·98 to 27·81. The other removals are practically

the same for both periods. But the number of ten-year patients has greatly increased in the latter period, though the exact amount of the increase cannot be stated on account of differing bases of computation. These patients now amount nearly to one-half of the total population. Calculated in four-year groups, the combined recoveries and deaths show a steady and disquieting decrease—from a percentage of 21·26 on average residence from 1890–1893 to 15·28 in 1906–1909, while for the single year of 1910 the ratio was as low as 13·94. This means that apart from transfers and other removals of a similar nature, the natural modes of clearing the asylum have become less effective by one-third and more. Truly the ratepayer may justifiably groan at the prospect. He desires no man's death, though he may appreciate a merciful deliverance. He would like to see his establishments cleared by good recoveries, but he is told on all sides that recoveries infallibly add to his stock of woe and expense in the future. One point of comfort does Mr. Keene make. He shows that the first attacks tend to decrease slowly, and of course it is these attacks which denominate freshly accruing insanity. The general preponderance of females over males in all the incidents of asylum experience is compared with the analogous figures for all England, and it appears that in every respect London shows a greater preponderance than that shown by the larger area. But the variation in London itself is not so great during the last four years grouped together as in the last ten years. The general ages on admission do not appear to tend to much variation (B. 4).

But as regards ages arranged in ten-year groups, it is shown in another table that there is a substantial reduction in young cases of both sexes during the last four years among the first-attack direct admissions, while there is a tendency to increase in average male ages, and a tendency to decrease among the females.

Touching the forms of insanity on admission (B. 5), a comparison made by Mr. Keene of the three last years shows a slight but persistent decrease of general paralysis, from 9·25 to 9·08 and 9·02. Recent mania works the same way, but more markedly, while melancholia goes slightly the other way. Senile dementia, secondary dementia, and systematised delusional insanity are up and down, varying slightly, but non-systematised delusion shows a progressive and substantial increase from 7·83 to 8·36 and now to 8·68.

The ætiological tables supply definite numbers of aggregated principal and contributory factors grouped together, but, as Mr. Keene points out, the obvious variation in the personal equation of the observers produces uncertain results, which are rendered more uncertain by doubts of sufficient accuracy and exhaustiveness of history. Table B. 9 shows that of 314 paralytics admitted, no less than 215 were married, and of these latter 215 as many as 125 had suffered from syphilis.

A comparison of the salient facts shown about recoveries in the first three of the C. tables for the past four years, shows that the age on recovery and the duration of attack on recovery work in and out, higher one year and falling the next. No particular instruction can be derived therefrom for the present.

C. 4 may be looked upon, perhaps, as one of the most important of all the tables. At least it is the most interesting from the medical point

Admissions and Recoveries, in the last Four Years, of Cases having certain Selected Aetiologies on Admission; with the Percentages of the Recoveries Calculated on the Admissions. (Only "Direct" Cases have been Considered.)

	Insane heredity.	Alcoholic.	Puberty and adolescence.	Mental stress of both kinds.	Privation and starvation.	Alcohol.	Syphilis.	Epilepsy.	Cardio-vascular degeneration.
A. Admissions and Recoveries in the stated Groups during the Four Years.									
Admissions.									
1907	704	226	211	902	169	830	323	261	369
1908	795	275	201	999	157	741	381	212	312
1909	898	263	204	882	158	684	324	250	294
1910	872	319	241	960	126	716	341	219	276
	3269	1083	857	3743	610	2971	1369	942	1251
Recoveries.									
1907	300	46	65	437	54	349	50	30	47
1908	286	71	104	413	53	294	56	53	59
1909	334	108	81	444	58	274	51	41	59
1910	338	88	100	402	39	284	45	35	54
	1258	313	350	1696	204	1201	202	159	219
B. Admissions and Recoveries in the same Groups in both of which the factor is assigned as "Principal."									
Admissions.									
1907	154	11	89	588	77	495	86	175	16
1908	127	11	95	621	55	402	106	136	15
1909	160	13	83	520	63	367	108	162	23
1910	87	10	104	613	47	394	117	144	29
	528	45	371	2342	242	1658	417	617	83
Recoveries.									
1907	74	5	35	306	25	267	8	24	—
1908	48	6	43	271	24	196	3	42	9
1909	56	8	43	247	13	151	8	26	2
1910	47	5	38	243	19	162	7	21	—
	225	24	159	1067	81	776	26	113	11
C. Admissions and Recoveries in the same Groups in both of which the factor is assigned as "Contributory."									
Totals of four years—									
Admissions.									
	2741	1038	486	1401	368	1313	952	325	1168
Recoveries.									
	1033	289	191	629	123	425	176	46	208
Percentages:									
Percentages of A.									
	38.4	28.9	40.8	45.3	33.44	40.4	14.7	16.8	17.5
Percentages of B.									
	42.6	53.3	42.8	45.5	33.47	46.8	6.2	18.3	13.2
Percentages of C.									
	37.6	27.8	39.3	44.8	33.42	32.3	18.4	14.1	17.8

of view, proving as it does the results of treatment when considered with the ætiology. Mr. Keene, as before, gives figures showing the proportions in which admissions, with certain selected ætiologies, supply recoveries. Last year we suggested another way of looking at the table. We take the same ætiological groups of admissions and place against them the recoveries supplied by cases in these groups during each of the last four years. We have further set out the groups in three ways, as shown below. We think that to contrast the assignment of a factor in both relations of principal and contributory taken together may help to settle the extra question of the relative efficacy of a factor in either of the two relations.

The first salient point in these statistics is, that after all there is not any marked difference in the action of a factor, whether it be regarded as a major or a minor agent. We might almost go as far as saying that, with exceptions, a factor has on the average a constant value in all relations. The disparity in the three averages of alcoholic insanity is of no importance in view of the very small number of instances. The same will apply to cardio-vascular potency. In the matter of syphilis, where both admissions and recoveries are considerable in number and fairly constant, explanation of divergence may be wanted, if the present ratios are supported by further observations. No doubt a considerable dose of a tenacious poison might be assumed in those cases where it is assigned as principal, and thus a lower recovery-rate would result. Perhaps in the question of alcohol the reverse results might arise from the dose of poison being more easily eradicated when it is the chief agent of attack, the less urgent relation being possibly less evident, but more chronic when noted, probably from structural changes.

Another notable point is the close resemblance of the figures of one year with another, especially when the agent is one that all persons are exposed to, whether by biological happenings or by the phenomena of average life. Puberty and adolescence claim practically the same number of victims each year. The hardness of this life for some, as evidenced by privation and starvation, wrecks the same number of brains, while the most remarkable similarity occurs in that class of cases in which alone the disturbing agent is applied direct to the brain itself, *i.e.*, where the agent is mental stress.

Then looking at the yearly figures of admissions arranged according to this selected ætiology, one cannot help thinking that possibly too much is made of the effect of certain adverse factors. We have to remember that from the national health point of view the ratio of incidence of each factor is between the actual numbers breaking down under it and the large majority of the millions of brains in the contributing area. What an insignificant proportion is offered by alcohol, which yields an average of less than 750 per annum out of upwards of 5 millions! The same may be said of alcoholic and all other heredities. The most dreaded of heredities, that of insanity itself, is represented by 800 per annum. It is true that many more cases are detained in the Metropolitan Board Asylums, which should be taken into account to make a complete survey. But a reference to the excellent statistics of that authority reveals only a beggarly heredity of all kinds and in both relations of sixty-six, while alcohol itself brought only twenty-eight. These

figures relate to last year only. We and all those who speak of these agencies from experience, more or less perfect, are accustomed to find a considerable number of failures, but our respective worlds are very limited. We see that these agencies bulk largely in relation to asylum population, but to get the right perspective of damage done we must open our eyes to take in the whole world. Still when danger arises, as it undoubtedly does, it is a good thing to have a big drum to beat and a strong arm to beat it with. But when we are talking science among ourselves the real truth is not to be found inside the drum. We must add that these remarks apply only to the insanity evidence of degeneration. No words of warning and denunciation can be too strong concerning the influence of these factors on causation of total degeneracy *i.e.*, of body, mind and conduct.

The D. tables contain nothing especially noteworthy. General paralysis accounts for 22·12 *per cent.* of all deaths ; 34 *per cent.* of the male deaths.

The E. tables show an increasing ratio of long residence—those over forty number 363 as against 283 in 1907.

We venture to make the suggestion that reference to the tables of the whole of County Council London would be facilitated if the summaries could all be placed together.

London Metropolitan Asylums Board Asylums.—The report of this authority naturally opens with a survey of the present state of affairs in regard to impending or possible legislation by which it will be seriously affected. It says that the absence of legislation cannot surprise those who are well acquainted with the complexities of the questions raised by the two Royal Commissions on the Feeble-minded and on the Poor Law. Perhaps in girding against the powers that be for remissness in coping with the former problem we do not sufficiently consider how deeply the latter question affects it. ; If we wait till both are handled together in order to insure harmony among the general principles underlying both possibly we may wait indefinitely. If one is attacked by itself there is sure to be an outcry, and there is sure to be great risk of uncertain co-ordination. Beyond that, difficulties are much increased, as the Board points out, by the fierce divergence between the majority and a very strong minority on the Poor Law. The differences seem to be irreconcilable. The County Council Association has attempted a scheme of conciliation, but this does not meet with much approbation from the Asylums Board. The publication of the County Councils Association may be recommended to those who take an interest in the Poor Law administration, as it contains a synopsis of both the majority and minority views in contrast, together with its own suggestions.¹ This synopsis supplies a ready method of mastering the leading points in all three schemes. We may add that all adopt, without hesitation, the recommendations of the Commission on the Feeble-minded. The Asylums Board further points out that the problems existing have changed even since the issue of these two reports, and that such legislation as has been passed for old-age pensions, for national insurance, etc., must have some influence, which will need to be ascertained and weighed before final adjustment of views. The Board adheres to the

¹ King & Son, Orchard House, Great Smith Street, S.W. Price 1s.

view it has repeatedly expressed—that Poor Law administration should be controlled by entirely separate bodies, municipal corporations being already over-charged with work. Meanwhile, many important reforms are being carried out under existing legislation. We desire to express again our opinion that this Board has most manfully carried out the trusts reposed in it, especially in regard to juvenile defectives, its work standing as an example of thoughtful administration to all the world.

With regard to the Superannuation Act, the Board states that out of 1,326 officers employed at the imbecile institutions, no less than 500 contracted out of the Act. Of these, 156 remained under the Poor Law Superannuation Act. It is silent as to the other 344, who, we suppose, being chiefly females, do not care to contribute. The Poor Law superannuation differs from our own, in that aggregation of service is paid for by the last employer solely. The reports of the Commissioners on the various asylums contain no fresh point, but Dr. Needham emphasises the success attending the living out of nurses and attendants at Leavesden, many of whom lodge with residents in the village. The reports of the various medical superintendents also mainly record present conditions, which are much the same as heretofore. Dr. Rotherham mentions considerable building additions at Darenth to be utilised in the unique training that is there given to imbeciles. This training was reported on at the annual meeting by the special committee appointed to report on the inspection of school-children (*Journal of Mental Science*, October, 1910, p. 734).

The statistical tables of the Association are fully adopted and are filled up with great care. There are one or two matters which bear remark on account of the asylum population being the complement of the county asylum population. The two sets of patients must be considered together for the purposes of a general survey, if it is desired to make a comparison with any other lunacy-yielding area. Many false impressions might be formed if no account were taken of the imbecile institutions.

For instance, the actual recovery-rate for 1910 in Council asylums in respect of total recoveries on total admissions, being 30·67 in 3,727, must be watered down, for all London, by the similar comparison in the Board's asylums, which gives 1·97 in 913 admissions. Out of 3,118 County direct non-congenital admissions, in which the duration was ascertained, 2,592 arrived within twelve months of commencement. The comparative figures for the Board's asylums are 328 and 110. As to age, in the County asylums, among the 3,227 admissions, 527 were sixty and over, while in the Board's asylums the relative figures were 913 and 341. In both cases the statements are in terms of Table B. 3. The congenitals in the same admissions numbered 327 and 624 respectively. Dementia, senile and secondary, was the form of defect in County asylums in 197 of 3,727 admissions, while in the other institutions the figures were 320 and 700.

We have referred above to the unexpectedly small representation of heredity among causal factors in the Board's institutions—only 66 of any sort of heredity in 536 cases where history was available against 1,353 and 3,477 in the county asylums. Alcohol and other factors, except three, appear to be less active with the Board's patients. The

three exceptions are trauma, which gives 92 in the county asylums and 28 here; senility, which, as might have been looked for, gives 274 in the county asylums against 291; cardio-vascular degeneration, which was found in 276 and 154 respectively. But curiously enough, we find that the senile cases actually yielded more recoveries in the Board's asylum than any other form, there being eight recoveries with that ætiology out of a total of 15 recoveries. This, added to 37 recoveries under similar circumstances in the County asylums (the latter, of course, out of a much larger total) suggests that after all something by way of treatment can be done for old cases, and that an indiscriminate hurrying them all off to, or indiscriminate retention in, the workhouse or similar institution as being hopeless, is not quite justifiable. The fact that some of these old brains can and do get right rather argues for what we call dementia not being of one rigid type. Cannot the class include a temporary functional hebetude arising from cardio-vascular derangement as well as the absolutely permanent failure, due to organic changes? For ourselves we believe that we, as a body, create for ourselves no end of needless difficulties in nomenclature, prognosis and treatment because we arbitrarily adopt in respect of all ages a sole signification for a mental condition which is by no means consistent in its results. The death factors are such as might be expected—chiefly terminal, with perhaps a little extra amount of the results of degeneration of the nervous system.

Brighton Borough, Haywards Heath.—We note that Dr. Walker resigned after many years' work here, and was succeeded by Dr. Planck, his second in command. It is with great regret that we hear of Dr. Walker's subsequent death. He lived a somewhat retired life, but he was an earnest worker who honestly cared for his patients.

The borough is to be congratulated on possessing not only a highly efficient asylum, but one that is larger than they need, and that earns them a considerable income from private and out-county patients. The committee say that the income from these has procured a large balance which can itself provide for all repairs without troubling the ratepayers. The relatives of a former patient have sent the committee a sum of £100 as some acknowledgment of kindness and medical attention.

Buckinghamshire.—Record is made of a suicide of a female patient when on probation. She had never shown any signs of suicidal intention and had apparently recovered. We suppose that in this instance, as is not infrequently the case, a feeling of despair at having to face the world again overcame a brain weakened by the attack of insanity. There must always be some risk of this, but it cannot be foreseen. Another curious case is noted: a female patient suffering from carcinoma was found, while lying in bed, to have a fracture of the right femur. In the absence of any sign or history of violence this was considered to be "spontaneous." Two months afterwards the other femur was found to be also fractured. The *post-mortem* examination confirmed the opinion. Such cases are worth noting as an answer to those, including even some of our own members, who feel a difficulty in assigning any other cause of such conditions than violence. This is particularly so with hæmatoma auris. We ourselves know of a case where one ear was affected, undoubtedly by an accidental fall. A few nights after the other ear was affected spontaneously. The patient

happened to be one of the querulous type, and he stated that the thing came of itself without any outside agency. A woman was admitted pregnant. She made a good recovery. She had gone through both these processes five years before.

Cardiff Borough.—This report chronicles much highly scientific work done by the able and varied staff. Of this work the Association had every evidence when the February meeting was held at the asylum. We take this opportunity of offering an acknowledgment of the kindly manner in which the members were received, not only by Dr. Goodall, but by the Corporation and Committee. It was indeed a successful meeting from all points of view. The pathological department has the advantage of being aided by the pathologist and bacteriologist of the Cardiff Infirmary, while the important chemical research now being carried out in the asylum, especially in the indican question, is conducted by Dr. Stolberg, whose connection with the asylum staff is restricted to such purely scientific matters. The recent back numbers of the Journal testify to the volume and the worth of the research. Prolonged warm bath treatment is receiving energetic attention. General paralysis is making up lost time after sparing Wales so long. About one-quarter of male admissions were due to it. Melancholia types were more frequently found on admission than mania types in the recent cases, but the reverse happened with the recurrences. Heredity of one sort and another and alcohol both contribute about 25 *per cent.*, while considering the amount of general paralysis the discovery of the existence of syphilis in only 10 out of 122 males is somewhat remarkable. Mental stress certainly seems to have been a less formidable agent than usual, being represented by only 10 *per cent.* of the admissions of both sexes. Superannuation and the effects of contributions have been considered by the committee, who resolved to increase the salaries of those earning, with emoluments included, less than £170 per annum. We, while acknowledging the kind thought for the less affluent members of the staff, fail to see any reason why parity of that thought should not have been extended to the higher paid officers. They have to contribute in the same ratio; and, still more to the purpose, they lose equally their chance of a pension under the old Act without any contribution. We presume that in the beginning salaries and wages are fixed on some principle of value of services, necessity for keeping up houses and appearances, capital expenditure on education and so forth. Perhaps the absolutely greater expenditure has something to do with the invidious distinction. We can but trust that, a beginning having been made, the extremely level-headed gentlemen whom we had the pleasure of meeting may give the matter further logical thought, and do away with what must cause some little irritation. It is somewhat grating in Dr. Goodall's own report to be suddenly taken from matters of scientific interest to the amount of gas consumed and the quantity of artichokes and onions produced. Such matters might well be relegated to another officer's report, always excepting when they are informing or illustrative of work done as ancillary to the prime object of the institution. After the sales of pigs and bones comes an interesting bit of information. Two nurses have passed the examination—a difficult one—of the Incorporated Society of Trained Masseuses. It is

believed that they are the first to show their efficiency thus. Considering the importance of this often valuable treatment being performed efficiently and not perfunctorily, we may hope that the good example will soon be followed elsewhere.

Joint Counties Asylum, Carmarthen.—The Superannuation Act has had the effect of clearing out several aged attendants who were qualified to take advantage of it. The result has been to reduce materially the average age of the male staff. From the report of the Commissioners after their visit it does not seem that any great improvement has occurred in matters to which we have adverted in former reviews; nor does the Committee seem to recognise as yet the trustful nature of their office. We do not quite know which has the worse effect on the asylum—over-visitation and dislocation of responsibility, or under-visitation and its evidence of little outside interest. Dr. Richards in his report says that although the physical health of the patients has not suffered materially, over-crowding is undoubtedly responsible for the low recovery-rate, as it interferes with proper classification and treatment. Dealing with the term “recovery,” Dr. Richards puts it happily. It means, he says, nothing more than a disappearance of mental symptoms for such a period that, under favourable circumstances, they will continue to remain in abeyance. He says also that it would be well if all cases discharged could be medically supervised and monetarily assisted for several months after leaving the institution. One male died of senile decay at the age of 106. He had been an inmate since the opening of the asylum and had never lost a tooth.

We may advert to the fact that all the tables, which are fully produced under the present *régime*, are contained in the ordinary pages of the report, there being no extra folded sheets. Where this is possible it conduces much to the easy study of the statistics.

Cumberland and Westmorland.—One of the principal reasons, if not the chief one, for separating direct from indirect admissions in the new series of tables was the better chance of a good history being obtainable with the former. Dr. Farquharson has had to make many complaints that histories cannot be obtained, because relieving officers in his area are in the frequent habit of sending deputies who know nothing of the case. If guardians cannot be got to see the importance to all of a good history, one will not regret to see them disappear in the course of impending legislation. They might well reflect that they, like the administrators of the asylum, are public servants, appointed by the same electors who choose the asylum visitors. As a consequence 54 cases out of 174 have to be withdrawn from the careful analysis of scientific facts which is supplied here. We note that the female death-rate notably exceeds that of the males. General paralysis caused six female deaths to five male. The female deaths from this disease were in cases of longer duration than obtained in the male sex; in the latter, death generally occurred between one and two years from the onset of the attack.

Dorset.—Dr. MacDonald, in adverting to the smaller admission of depressed cases in comparison with former years, gives his experience that the admission of many depressed cases is invariably accompanied by a higher average residence, and the converse seems to be true in relation to the figures for last year. He is very firm in the opinion

that the care of all classes of mental defect should be entrusted to one authority—the visitors of the county asylum. We know that in many cases the educational authorities do not consider that they should be saddled with the responsibility now placed on them. But we doubt whether his further idea that all classes should be confined in one many-sided institution is to be commended. We feel sure that such an arrangement would defeat one of the aims of the commission on the feeble-minded, which is to get all cases brought under suitable control. At present there is, and there ever will be, considerable trouble in differentiating between the various classes of minor defect as to how they shall be treated; drawing the line between cases of very minor defect for the purpose of sending some to the asylum and leaving some at home will be infinitely more difficult. And we cannot hope that the parents' willing consent will be gained for admission to the asylum, whereas less harsh proceedings might be readily accepted. Too clean a sweep of all defects into the asylum would raise a troublesome feeling of unnecessary harshness, even of brutality. He is quite right in claiming that all cases should be taken in good time; we would add that they should be kept for a good time. We note that while three male deaths and one female death are attributed to general paralysis in D. 2, only one death, the female, is noted in D. 3 as assigned to that disease on admission. We conclude that in the male cases it was impossible to make the diagnosis at the outset. If such is the case it confirms our impression that general paralysis is less obscure in the case of females than in the other sex.

Kent County.—In both asylums of this county the statistics are kept up rigorously in the new form and are undoubtedly destined to be valuable. But, as we have pointed out before, the full value must be lessened by the absence of any delimitation of the areas yielding their respective admissions. It is not possible to say what influence such a special centre as Chartham may have. For aught that is said in the report it might send its patients to either, and wherever it sent them, they would in all probability make a mark in the large number of admissions suffering from general paralysis. In one matter there is distinct contrast between the two asylums; whereas Dr. Wolseley-Lewis says that states of depression were predominant over the opposite condition, the converse is abundantly established in the figures relating to Chartham. Phthisis seems to be more fatal in the latter than the former, proportionately. Heredity of one kind or another is more marked at Barming Heath (just over 50 *per cent.* of the admissions) than at Chartham (just over 33 *per cent.*). In neither has alcohol its usual formidable potency. Syphilis is comparatively a feeble factor in Chartham, more powerful at Barming Heath, but in neither is it a very notable occurrence.

London City.—Dr. Steen reports one admission as having had no less than thirty previous attacks. In examining the ætiology of the admissions we found ourselves confronted with considerable difficulty in gauging the exact basis on which to calculate any estimate of the potency of a given factor. The table in question furnishes the factors and groups of factors adopted by the association in its new official series. It purports to give the probable causes in the “direct” cases and assigns

principal causes to 123 cases and contributory causes to 6 cases—together 129 assignments. Of course, as these tables are founded on the old system, there is no enumeration of direct cases, as far as we can see. The only way in which we can approach the facts is by deducting the thirty-four transfers to the asylum from the total of admissions—164, leaving 130 presumably direct cases. Further, we need hardly point out that in the new system it is only the principal factors that count, the contributory factors being denied co-ordinate value. Possibly in the odd case of the 130 not accounted for it was impossible to assign any cause; in that case the fact should be so stated to bring ætiology up to the same point as is aimed at by our new system. We must confess that we would rather see the old table kept up than that there should be any chance of comparison with the results given in other asylums where the new system is rigorously adopted. We can recognise the attitude which some take up in regard to that new system, but since the facts are ready to hand wherewith to construct a table either on the old or new system, the latter would seem to be far preferable, as it would give a comparing value, which the old table can never give. Half adoption is useless and dangerous.

Dr. Steen makes some valuable remarks on the comparative immunity from phthisis at Stone. The mortality-rate is only 6·3 per 1,000. The personality of the patients, either as to rank or nativity, has evidently no influence. The situation is exposed, with but little shelter from the east wind. But the asylum is built on a chalk hill like Cane Hill, where the phthisis rate is the lowest of all the London County asylums. Here, too, we can point out that the asylum was opened as far back as 1865, and is a comparatively old asylum as asylums go. It is old enough to have acquired a heavy phthisis infectiveness, if there were any truth in that theory. Dr. Steen thinks that he may claim some help in this direction from the large amount of fresh air which the patients have. The verandahs are much used, and have been made more usable by light shutters to prevent rain driving in, but the cases are taken indoors at night when the severe weather comes on. Then many of the patients rebel, as they become attached to sleeping in the open air. Perhaps Dr. Steen will find means to keep them out all the year round day and night, as at Long-Grove. Dr. Steen gives yet another case illustrative of the need to extend to public asylums the right, which obtains in other institutions, to receive voluntary patients. A former patient, feeling premonitory symptoms of another attack, came for readmission but had to be sent away disappointed, as he was not advanced enough for certification.

He says that the new Superannuation Act was received with but little enthusiasm, probably owing to the generous treatment ever received by the staff at Stone. This hard fact was foreseen, and the blame for it must ever rest on those authorities who, by their meanness, forced the lower, but assured, scale.

Middlesbrough Borough.—There has been a marked and welcome diminution, not only in admissions but in average residence of the Borough patients. Among the 69 direct admissions toxins appeared as factors in 24 (syphilis 4, alcohol 18), senility in 6, heredity in 12, and stress in 8 only. The figures represent both principal and contributory

influences. The paralytics numbered eight, only two of them showing positive evidences of syphilis. As might be expected from the character of the area, recent mania was the predominant form of insanity on admission, accounting for twenty of the direct admissions. Phthisis accounted for ten of the fifty-one deaths—a heavy ratio for a new asylum.

Monmouth County.—It is pleasing to know that Dr. Glendinning has suffered no ill consequences from a serious attack made upon him by a patient at the beginning of last year. We commend to the notice of the Joint Committee which has watched the Superannuation Act the fact that the Chaplain has been included in neither class, in other words he has been disestablished practically from all rights under the new Act, and presumably from those he had under the old provisions. It is hardly likely that a Committee who would not bring him under the former would do anything for him under the old Act. As a commentary on this decision we quote a passage from the Chaplain's report to the same Committee: "The daily morning service in the hall, the weekly visits to the wards, airing-courts and infirmaries, special visits to the sick, and other duties of my office have been carried on regularly, punctually, and to the best of my ability." The deaths from phthisis—eleven out of seventy-five—were all in female cases except one. Dr. Glendinning can only offer as explanation of this great disparity the fact of the more sedentary life led by the women. Indeed the general population shows a large majority of men, no doubt due to more men being admitted and more females being discharged. The death-rate, in spite of the phthisis, shows a preponderance in the males, paralysis destroying almost the exact number as phthisis in the females, and in the same proportions. About one third of the males were colliers or colliery labourers. It might have been thought that this fact would account for the very great preponderance of mania type over melancholia in the admissions, but in fact the women in both these classes considerably out-number the men.

Norfolk County.—The Chaplain here has had better luck than at the Monmouth Asylum. After thirty-six years of service he has obtained under the new Act a pension of £116—not a very grand reward for the work which according to Dr. Thomson he has done. We reproduce Dr. Thomson's description of that work in the hope that all these memoranda may be found useful in the attempts to get justice done to the particular class. "For this long period he has almost daily and in all weathers come three miles from his home in Norwich and performed most faithfully all the varied duties of his office to the comfort and benefit of the patients and the staff." A nurses' home has been designed and built here. It seems to be a comfortable and pleasant building. Plans thereof are given. It is in charge of a senior nurse who is responsible to the matron for its comfort and good order. No superior officer lives in it. Dr. Thomson introduces his Committee to the desire of the Association to provide A.M.Os. with a diploma, and he gives the reasons for this, such as were given at the last general meeting in November. It is quite a good plan to make Committees aware of the aims of the Association in this direct manner. It brings the matter also before the ratepayers and others in the county who may read the report itself. The remarks that we made about the ætiology table

at Stone apply here with even greater force. Though we can find the number of direct admissions clearly stated, we cannot after much labour fit either the details or the totals together. We think that there is plenty of room for serious misreading of facts in this hybrid form, which could not arise if either the new or the old system were relied on. General paralysis (11) and phthisis (19) were the most active causes among the 117 deaths, apart from senile decay.

Stafford County.—This county, having three separate asylums, affords opportunity of contrast between the insanity of the various areas supplying the separate institutions. As we have pointed out before, it would be an advantage to an inquirer if these areas could be stated in the report, so that the inquirer might be able to consider the relation of urban to rural areas. As we show in the figures of this year there are undoubted differences in some respects, which suggest the operation of varying conditions. In a former review we mentioned the question of occupations, in which there is considerable variation between agricultural pursuits as contrasted with mining and manufacturing. We offer the suggestion that there is in the county a good opportunity afforded by these contrasts for one of the younger men to take up a serious inquiry into the whole of the insanity, ætiology, occupations, the varying incidence of forms of the disease, ages, congenitalism, both mental and bodily, and so on. It might well, if the variations are found to be constant, form the ground of competition for one of the Association's medals. There has been much good pathological work done of late and a really good social thesis would be refreshing, and in these days of social unrest the material might be found to be of great value in the consideration of defectiveness. We append a few figures which are suggestive. We may at once say that in some respects the personality of the observer may have a determining value, but in many cases facts are unalterable by any opinion. Before leaving the general survey of the asylums we would wish to mention a point that is common to all. In each report the Commissioners' entry shows not only a warm commendation of the work done and its results, but also a kindly acknowledgment of endeavours made by the doers of the work.

Forms of Insanity on Direct Admission.

	Stafford.	Burntwood.	Cheddleton.
Mania	81	175	43
Melancholia	46	23	61
Epileptics	16	21	18
Dementia	25	16	6
General paralysis	2	1	33
Total direct admissions	202	267	205

Ætiology (left hand figures are where the factor is principal, the right are where both principal and contributory are combined).

Heredity (all kinds)	51	58	55	119	45	139
Puberty	1	1	5	5	1	9
Mental stress	16	53	45	75	26	60
Alcohol	6	25	6	25	31	50
Syphilis	2	2	2	3	32	49
Trauma	7	11	2	4	—	7
Cardio-vascular	6	15	—	2	1	17
Senility	21	22	21	25	4	8

Causes of Death (principal causes only).

General paralysis	.	4	.	17	.	13
Phthisis	.	26	.	16	.	18
Senile decay	.	12	.	8	.	3
Total of principal causes of deaths		101	.	84	.	125

Mental Condition of Remainder.

General paralysis	.	4	.	18	.	42
Dementia	.	167	.	218	.	238
Total remaining	.	872	.	908	.	1020

Dr. Menzies' report shows that the tubercular affections in the asylum at Cheddleton are by no means represented by the figure above, no less than 72 *per cent* of the 111 *post-mortem* examinations revealing its existence in one shape or another, active, potential, or obsolescent. He gives an interesting but very grave recital of asylum dysentery in his wards; 15 out of 73 cases had a fatal termination. He has no doubt that its virulence is increasing; but he thinks that its occurrence depends less on that virulence than on increased susceptibility. He finds, from his experience, that sudden changes of temperature lead to outbreaks, and he is of the opinion that, however advantageous to general health the fresh-air cult may be, it is not the best thing for dysenterics. He is certain that a large number of "carriers" exist among his patients. A large amount of research into fæces, etc., was done for him by the Lister Institute with interesting results in one case. In the fæces of this woman, Mary Ellen James, suffering from an attack at the time, a hitherto unknown bacillus was isolated. This has been named after its putative parent, and is known thereby for all time. She was treated with a serum raised from her own strain and made a recovery. So, too, a vaccine prepared in Cairo from mixed Egyptian strains has been found in some cases to act like a charm. But Dr. Menzies is not confident as to the permanent results of such treatment, thinking that, while the attack for the time being is inhibited, the secondary fatal infections are not benefited. He is trying the remedial effect of large doses of weak potassium permanganate solution, and will report in his next on its effect. The Wakefield treatment does not appear to be so successful here as in the place of its origin. The whole of Dr. Menzies' information is of the greatest importance to the future treatment of this disease in all asylums, and is to be commended to the attention of all superintendents. His remarks as to the want of resistance to the poison suggest that in this direction it is possible that some day may be discovered an important guide to the particular method in which the want of resistance is produced by neurosis, and conversely what may be the physiological element of nerve force which produces normal resistance and immunity.

Sunderland Borough.—Dr. Middlemass contributes a careful and concise *résumé* of the chief points which are now exercising the minds of all who look ahead of the present time. It is very desirable that every opportunity should be taken to bring such reasoning before the public, especially in an asylum report, where the weight of a medical superintendent's views would presumably have especial value in his own area. Many already have some idea on the subject, but even of these, many do not really grasp the logic of facts bearing on it. Dr. Middlemass

puts facts and arguments so clearly and happily that we are tempted to reproduce a considerable portion of his remarks.

Public opinion already recognises the weakness of the present means of dealing with such a case as the following one. A man, æt. about 24 years, has an attack of insanity for which he requires to be sent for treatment to the asylum. There he recovers, and consequently must be discharged. He goes, and soon after marries. He has two or three children and then has another attack of insanity, for which he has again to be sent to the asylum. He recovers once more, goes out, and this process is repeated, until in the end his mind becomes permanently damaged and he remains in the asylum. During his residences at home his family increases, and it is more than likely that, while the man is in the asylum, they and the wife are on the rates. This is no fanciful picture, but one the like of which could be told by every asylum superintendent from his own experience. If the community assumes the duty of maintaining this man and probably his family as well while he is in the asylum, it is being urged that in return for the performance of this duty the man shall not, if he can help it, do anything to add to the burden he has already put on his neighbours. If he refuses to acknowledge that debt, it is argued that the law should be strengthened so as to give the community power to step in and say he shall not be at liberty to defy its rights, but shall remain in the asylum and so be prevented from doing so.

There are other classes in the community besides the actually insane with respect to whom much the same arguments might be used. There are many individuals who from birth are of feeble mind without being definitely insane. When they are poor and cannot be maintained except by their own labour, they find it difficult to get steady employment, and are by their defects incapable of qualifying themselves to obtain it. Many of them become chronic paupers and a burden to their fellows, or in other circumstances they may drift into the ranks of the criminal class and so become a still greater burden. One cannot help feeling that if such persons were taken in hand early in life, educated as far as their faculties permit and for work of which they are capable, there would be a much better prospect of their turning out more economically efficient than they do at present. That this is not merely a dream has been proved by one of the metropolitan asylums. Moreover, the material they have had to work with has been of an even lower grade of intelligence than the feeble-minded. It has, however, been found there that even they can be educated when young in various handicrafts, which training enables them, under supervision, to do something in the way of contributing to their own maintenance. If this has proved successful with imbeciles there is good reason to hope it would be even more so with the merely feeble-minded.

Another reason in favour of their segregation is that already urged in connection with the recurrent insane. That steps in this direction should be taken has been urged both by the recent Commission on the Care and Control of the Feeble-Minded and the Commission on the Poor Law. Many authorities have taken this up, and all that remains to be done now is to secure a further weight of public opinion and bring this to bear on the Government.

We find a passage in Dr. Middlemass's report to the effect—"They (causes) are divided into exciting and predisposing or contributory." We do not think that he is justified in saying that the two latter terms are equivalent. There are many causes of which it can be said that either term would fit, but the contrary is equally true. All predisposing causes are contributory, but many contributions are not truly predisposing. Take the case of a normal man who has no special heredity, who uses his brain strenuously, but not more than other normal hardworking men use their brains. He becomes alcoholic, and finally develops mania. It would be an abuse of terms in such a case to say that his brainwork has been predisposing to insanity. If this were so, it would become our duty to decry strenuous brainwork as we decry all agencies, whether predisposing or exciting. But the term "contributory" might very properly be

applied to it. Then as to the complementary term "exciting," we note that he, as several others do, returns puberty and adolescence under it. The line of argument is that many brains, when there is heredity, break down at this period without any other special recognised factor. But later on he says that in half the cases sent to him "there is an inherited constitutional tendency to an attack of insanity. But the actual attack can be warded off by care, and the avoidance of those causes which are known to operate towards developing the latent weakness and making it actual and visible." This is absolutely true, but it argues that as we cannot ward off the puberty and adolescence by any care and avoidance, there must be a *tertium quid* to determine the realisation of the threatenings of combined heredity and puberty. This third element generally is, as we know, unsuitable environment and education. If this be true then puberty must lose pride of place as exciting, and we must substitute for it a negation—failure of the positive preventive. Is puberty, then, to be counted as a predisposing factor? Hardly, we should think, certainly no more readily than any other normal event. Its true position is admirably covered by the term "contributory." The new terms of "principal" and "contributory" were conceived by the Statistical Committee purposely to give the go-by to the doubts and sources of error raised by the old terms, and further, in their scheme there is a *locus dubietatis*, when doubt arises with even the elastic new terms. We further venture to suggest again that, where the actual factors have been extracted and weighted with care such as Dr. Middlemass has given to them, they might just as well be placed in the strict form of Table B 7. This would need no adoption of the general scheme. And yet one further word—if it is recognised that the assignment of factors makes for scientific truth and improvement of knowledge, then we say that correlation of these factors is essential to the highest evolution of truth. Dr. Middlemass says, in his report, that forty-four of his admissions displayed heredity, and his tables show that puberty was the assigned factor in nineteen cases. Again he says, referring to developmental failures—"In many, especially in those who have inherited any tendency to mental instability, this stress is sufficient of itself, and without any other special factor, to cause a mental breakdown." Would it not be helpful to exact knowledge if the number of such breakdowns, depending on the combination of the two factors, was correctly set out and easily ascertainable? That is the precise function of Table 8. It is not too much to hope that these two tables at least may be more fully adopted by those who still fear the whole scheme.

Sussex East, Hellingly.—The variations in admissions from year to year are considerable. To the end of 1909 the average increase for six years was 25·6 for the county and 7·6 for Hastings, whose patients are housed at Hellingly. These averages have been increased by the operations of the last year to 31·8 and 10·5 respectively, the average number for both localities having heavily increased in 1910. Dr. Taylor, like Dr. Lord, finds more delusional insanity of late among his admissions, with less senility, but increased congenitalism. The death-rate from tuberculosis has again decreased, being considerably less than half of the asylum rate for all England. Plenty of fresh air is the suggested explanation for this improvement. One case of juvenile

general paralysis was treated with "606." Considerable constitutional disturbance followed the injection of '3 grm. The bodily symptoms improved, but not so with the mental condition. Dr. Taylor thinks that to do any good this treatment must be adopted before there is any extensive destruction of neurons. Heredity was found in 50 *per cent.* of the admissions of both sexes, after excluding cases with insufficient history.

West Ham Borough, Goodmayes.—The admission-rate is falling here steadily. The rate of first-attack patients admitted was 11'76 per 10,000 of population in 1902, and has now come down by progressive decreases to 3'51. The ratio for pauper admissions per 10,000 population for all England is 5'40 for 1910. Looking to the locale of the population supplying the asylum, one would expect to find certain ætiological factors much in evidence. Privation and starvation account for a small percentage in excess of the all-England rate. Prolonged stress is much more marked than in the general rate, while sudden stress gives less. Alcohol and syphilis are also in excess. Heredity is heavy, being found in 50 *per cent.* General paralysis was diagnosed in a little under 8 *per cent.* of both sexes combined, while the males supplied just 15 *per cent.* Recent melancholia among 182 cases accounted for 31, and recent mania for 19, while the recurrent cases of each were 16 and 18 respectively. The large number of primary dements (12) is recorded. We find that among the 55 recoveries no less than 8 were of this classification on admission. Dr. Hunter evidently does not bow the knee to the idea of irrecoverability arbitrarily given to dementia by some authorities. The occupations were many and diverse, being in keeping in these respects with one's estimation of the character of the population. The docks, shipping, factories and the customs all sent representatives. In an extra table Dr. Hunter gives the weight results in each recovery. Three females lost less than a stone between them, while the others put on several hundredweights in the bulk. Such a table affords much support to the gospel of fat. It would be interesting if, when some one has the spare time, the weight of each non-recovered patient of the year's admissions could be taken, so that the general effect of rest, plus suitable and sufficient food and medical treatment, could be contrasted with the gains and losses connected with recovery. Among the 79 deaths, tuberculosis of lung caused 8, four of each sex; general paralysis caused it in 17 males and 1 female.

Some Registered Hospitals.

Barnwood, Gloucester.—The recovery-rate dwindled in 1910 from 40 to 28'2 *per cent.*, when the rate is calculated on total admissions. If, however, the transfers are eliminated the rate rises to 47'8. The recoveries included two female cases of over ten and six years' detention respectively. Each case was the subject of profound melancholia, associated with intractable anæmia. In each case improvement, both in body and mind, happened repeatedly, to be followed by relapse, till a healthy condition of blood obtained and remained. In both the resistiveness of the melancholiac was a marked symptom. As Dr. Soutar

happily remarks, there are certain cases in which the experienced physician can foretell results fairly well, but beyond these are many in which it requires the "audacity of inexperience" to say what is going to happen. He further points out that in such cases, with a potentiality either way, the hope of "going home" is an essential stimulus to recovery. The enforced rupture of the marriage bond would take this away with fatal results, while, in addition, it would add indefinitely to the grinding torments which such cases have to endure by reason of their disease. Before the great divorce question is settled it is very necessary that our almost unanimous opinion shall be brought strongly before the intellects, and we might add the consciences, of the people of the land. He gives a very interesting account of the mental operations in a case where parole had been given, and "the voices" exercised their usual mischievous influences. The young man owned that one evening "he was very nearly gone." The voices had during the whole afternoon been repeating the word "escape" to him. Even when at the door of the hospital he mounted his bicycle again and rode off some distance, but in the end his promise prevailed. Next morning he was acutely excited.

The Retreat, York.—Dr. Bedford Pierce, in adverting to the absurd and mischievous reports in the Glasgow papers as to the curability of insanity by newly discovered means, states that he had the pleasure of hearing Professor Ehrlich in Berlin on the subject. The Professor distinctly stated that he did not think that the remedy which is designed against syphilis is of avail when the process has reached the nervous system, giving theoretical reasons for this opinion. So there is another Dagon thrown down and in pieces. In five out of fourteen female first admissions, with a history, parental alcoholism was found. He notes one case of determined suicidal intention in a lady who was usually cheerful and even merry, full of resource, and highly intelligent, which made the care of her a very anxious responsibility. The mental pathology of such a case would be far beyond the comprehension of a coroner's jury, if occasion called for the services of such a body. But it is well to have such instances of merriment combined with desire for death to refer to on such an occasion. It would be interesting for such as ourselves to discover what, if any, was the prime motive in a case like this. The lady eventually recovered. In referring to the care needed by voluntary admissions, and to the less frequency of recovery taking place than might be looked for, Dr. Pierce states that in two cases recovery began to take place on their being certified. He thinks that the sense of security, together with the removal of hesitation and doubt about giving notice to leave, have a really steady effect on the unstable mind. We can quite endorse that opinion. One other contributory element must be that certification leaves the medical man in no doubt how far he can go in applying such measures as are required by the insanity, without having to reckon with the patient's approval.

Large success is attending the trained nurses' department which he has started. It is financially entirely independent of the asylum itself. The entrants have all obtained the Association's certificate, and, further, they have obtained the Retreat special qualification after four years' training. As he trains far more nurses than can possibly be provided

for in the senior posts of the ward, a career of usefulness to themselves as well as to others is hereby provided. They are useful for taking patients on trial, etc., thus leaving the nursing of the wards at full strength.

Warneford, Oxford.—A curious feature of this institution is, that of 98 patients in residence no less than 46 have been transferred from other places. Some of these are brought for the medical effect of a change, others to meet the convenience of friends residing near Oxford, others on account of dissatisfaction with precedent conditions. Some had been refused further care elsewhere, but the majority suffered from the pinch of finance. Of the 46 transfers, 23 were from other hospitals, 18 from private asylums, 3 came from county asylums, and the balance from single care. As Dr. Neil says, these occurrences may be claimed as evidence of the benevolent work done, but they do not promote the recovery-rate. Nevertheless, he can show a rate of 73 *per cent.*, calculating the total recoveries on direct admissions, the rate falling to 28, when they are calculated on the direct basis in regard of both admissions and recoveries. We know that in some institutions it is more than a moot question whether they, designed possibly in the first instance for promoting recovery, shall continue to have their energy dulled by chronic incurability. But even so, it is cause for thankfulness that there can be found other institutions which recognise that much insanity is incurable, and is in urgent need of protection and that betterment which falls short of cure. *Chacun à son goût.*

Wonford House, Exeter.—Year by year the finances of this hospital, which not long ago gave considerable cause for anxiety to its governors, become more confirmed in stability. In view of the fact a new recreation hall is contemplated, while a nurses' home is in process of creation. This will cost about £3,500, and as it will release accommodation now taken up by twenty-three nurses in the hospital itself, it would seem to be a reasonable way of extending the accommodation for patients, which is much desired. Among the 51 certified admissions, Dr. Morton had to reckon with no less than 36 with definite suicidal tendencies. He has found great benefit to arise in the treatment by adapting a shelter in one of the ladies' gardens for more regular habitation by recent cases in feeble bodily health. There is evidently a strong football team among the employees, which has been successful in winning, as well as in rousing interest in the patients.

Some Scottish District Asylums.

Aberdeen, Kingseat.—Dr. Alexander, in speaking of "606," adds two reasons for its unsatisfactory results in the treatment of general paralysis. One is that the syphilisation usually occurs long years before it manifests itself by insanity. Beyond that, the man who is to become a paralytic is one of the last people to take proper care of himself after being inoculated. Alcohol, as a factor, occurred more frequently in the female cases. He speaks somewhat hopelessly of the likelihood of the new Superannuation Act being of any service to the nurses, as they are worn out by twenty years' service long before the age of fifty-

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five. The hospital section is becoming full up, and more accommodation there is called for. The present accommodation for all recent cases, the sick, suicidal and feeble, is about one-fifth of the total. From the experience acquired by him in the years of this asylum's existence, he is of the firm opinion that one-third is a proportion that will better meet calls on the department. In our humble opinion, the better solution of the question of further room would be the removal of all but the recent cases, and of those the incurable ones should be immediately taken away. No doubt convenience is studied by the more comprehensive scope of the hospital, and possibly that convenience will enhance the medical work bestowed on all that require it. But the wholesale grouping together of several distinct aims and objects defeats at the very outset the prime object of a discrete asylum, which is the promotion of recovery. Possibly the sentiment of resemblance to an ordinary hospital has to be considered, but where is there any hospital or infirmary worthy of the name which has its medical, surgical, obstetric, skin and juvenile cases jumbled up together in its wards? Ideals are apt to master practical aims. The nursing spirit is preserved in the outside world, however far separation of differing classes is practised. Why should it not be preserved on the division of mental cases from physical disease in the asylum?

Dr. Alexander has started a new table, which on the main point is quite praiseworthy, though in some of the details we find it needful to take exception. It is similar in its aims to what we have been dealing with under the remarks of the London County Council's asylums, a full and unimpeachable treatment of the statistical facts brought out by a comparison of the new tables B 5 and C 3. He has taken the factors in each of 989 first-attack direct admissions, which have occurred since the opening of the asylum in 1904, and he has traced, *person by person*, the number of recoveries of these, according to their classification. Thus we can say, as far as these accurately observed cases help us, what is the prognosis of cases in various classifications.

All that the table wants is a side column giving the proportions between the admissions and recoveries in each form. We note that melancholia gave just about 66 *per cent.* of recoveries, mania about 48, primary dementia of adolescence 0, alcoholic 43, non-systematised delusions little less than 10 *per cent.* We could wish that others would follow the same plan, not only in regard to form but in regard to ætiology. Reasonable accuracy cannot be attained by any other means. But we regret that we cannot foresee any useful results from aggregating such knowledge in Scotland at least, on account of the ingenuity displayed in varying the forms in which knowledge is promulgated. We feel it proper, indeed necessary, to take this opportunity of drawing attention to the invidious, not to say ridiculous, position in which statistics of insanity stand in a region which is a foremost exponent of psychiatry. We have before us nearly a dozen reports from Scotland, coming from both District and Royal Asylums, and it is not too much to say that, apart from the question of arrangement of the individual tables and their form, there are no two alike in the important matters of classification and ætiology. Some adhere in the main to the old tables of the Association, others adopt in part the new classification

and ætiology ; some have their own system of stating these particulars, while silence is not unknown. The most useful are those which give the ætiology in either form, but correlate the items with heredity and previous attacks, thus commencing the idea of the new Table B. 8 ; but in any case we fear the material is wasted for the purpose of gathering the whole into such a mass as will give an average of universal opinion. It is not as if distaste for the new tables is at the root of the thing. There is, and always has been, statistical anarchy in Scotland, where there are so many thoughtful and practical brains always at work. Is it right that this should continue? Home Rule may go even as far as having a set of lunacy statistics for each kingdom, but let each kingdom *have* its own, if it is to be looked to for substantial help in solving the problems that beset us all.

Returning to the present report, we think that there are points in both ætiology and classification which need to be criticised. In both cases we imagine that Dr. Alexander has evolved a set scheme for each, since we see items mentioned which have no numbers set against them. Thus disseminated sclerosis in the one and insanity associated with paralysis in the other have no representation by actual sufferers.

Among the factors we find a group, infection-exhaustion. It is not clear whether the exhaustion is an independent addition to a composite group or an essential accompaniment of infection. But among the associated exhaustion elements we find general debility. The scientific relation between infection and exhaustion in such an instance can hardly be established. But in the case of general debility, since no normal man can be generally debilitated without cause, it is evident that there is a *causa causans* behind the assigned factor, which latter is not the real factor. The whole of this group is returned as "exciting." The toxins are all returned also as exciting, though we can imagine cases of alcoholism in which the poison might be said to be predisponent. In the classification we find a group of insanity associated with various pathological conditions. As a preliminary criticism we may say that insanity associated with such and such a condition is no satisfactory answer to the postulated question as to form of insanity, unless the symptoms caused by the associated condition always follow such a consistent course as to enable an inquirer to formulate a mental picture of the case from the definition. Though we all know what general paralysis is, the definition of it as "insanity associated with general paralysis" does not satisfy the question propounded by the definition itself. What was the form of insanity as thus associated? Was it of the maniacal, melancholic, or demented type? Then who would be bold enough to attempt to give a clinical description of the insanity which is associated with Huntingdon's chorea, especially as distinguished from that accompanying ordinary chorea, for which provision is also made in the same group? Then these associated insanities are divided as between the association with organic nervous affections and with functional nervous affections. There is another group of infection-exhaustion psychoses which is not very enlightening in its nomenclature. Naturally such an ætiological classification detrudes the clinical and symptomatic to a great extent, though both are represented, the former by mania and melancholia, the latter by delusional insanity, which

names are, we suppose, spared to accommodate any cases in which more definite ætiology is wanting.

Argyll and Bute.—The terms of the Superannuation Act were accepted by 54 *per cent.* of the staff; the large number of contracts-out suggests that permanence of employment is not before the eyes of all. Why not? It is to be noted that in Scotland the whole thing is a new benefit. There is no comparison, as in England, between the relative benefits of old and new legislation. It would appear that the small amount of contribution, possibly combined with a feeling of hopelessness on the part of the females as to their powers of endurance, is sufficient to discount undoubted ulterior benefits. Since benefit to the public is obtained by long and settled service, anything hindering the promotion of long service should be sought out and proscribed. The facts stated here may be of use in the endeavour that is to be made for altering the age clause, in regard to nurses especially. The varying proportions of admission between the two counties and those of recovery and death would seem to offer a field for inquiry into the circumstances that lead to variation. There is a sort of suspicion that the ill-effects of heredity are becoming a little worn as subjects of debate, and that environment might well take its place. The contrast between two varying areas by one observer might well supply useful ideas.

Ayr.—Dr. M'Rae is evidently of the opinion expressed above as to the relative importance of heredity and environment:—

As far as could be ascertained, and in spite of careful inquiry by means of a special printed form of queries sent to the relatives in each case, hereditary predisposition to mental diseases could be traced in only 32 *per cent.* This is a figure, however, that can in no way be relied upon, and, as suggested in last year's report, is often of very little practical value. It is still open to doubt whether any individual of the general population could be said to have a record absolutely devoid of insanity or other nervous disease very closely allied, if not actually identical to it, in his relatives. It has recently been shown by a French observer that among patients suffering from any disease whatever, 18 *per cent.* had a history of cancer in the family, while patients suffering from cancer had a history of its occurrence in relatives in 16 *per cent.* of the cases. An enormous amount of statistics were laboriously accumulated for years to prove the hereditary nature of consumption, only to be set aside by the discovery of the micro-organism which is now recognised as the true cause of the disease. In view of these and similar experiences, it is certain that elucidation of the causation of mental diseases lies in a search into environmental conditions rather than by attempting to sound the unfathomable depths of so-called hereditary predisposition. Indeed, the former is already proving a fruitful field of discovery by an ever-increasing number of investigators in the various asylums throughout the kingdom. That insanity appears in generation after generation of the same stock is undeniable. The fact admits of no explanation, however, unless the originating factor in our material surroundings which started the morbid process be discovered. It is only by ascertaining the cause and removing it that we can effect the abolition of any disease either in the individual or the stock.

Inverness District.—Dr. Mackenzie points out that insanity may itself be an unsuspected cause of insanity in others. Education and prosperity make the public and the individual more sensitive to the spectacle of insanity. He rightly inveighs against rigid and non-discriminating education for all brains, with little or no allowance for the requirements of class and local circumstance. No doubt if all local education authorities could be trusted to give scientific and experienced

directions for education in their own areas, the abolition of the central authority would be an unmixed blessing for all reasons. However, in the meantime, great improvement is taking place in this direction, earnest minds are becoming experienced. Phthisis is the predominant cause of death here, and it is an undoubted scourge, as it has been for many years. To combat it verandahs for open-air treatment have been instituted. Dr. Mackenzie has followed Dr. Watson's lead, *longo intervallo*, in instituting a single table wherein he gives personal information as to the ætiology of each case. But it has the disadvantage of leaving the inquirer to pick out numbers and totals for himself—about as satisfying as picking out winks with a pin must be to a really hungry man. We must take exception to general paralysis being returned as the exciting cause in more than one admission. If one could isolate a case of general paralysis as entirely somatic, there might be a possibility of justification for such a theory, but even then one would have to assume the possibility of the real cause of the mental defect being that of the somatic factor—syphilis for example.

Lanark District.—The Superannuation Act has been well received on the whole, but the farm-hands will not come in on account of the contribution. Therefore the Committee has had to disestablish this class altogether. Now that the National Insurance Act is passed it occurs to us that possibly many of the contractors-out may feel somewhat sore.

A good idea—the “Miss Julia Ferguson Gold Medal, awarded to the nurse, male or female, most distinguished in examinations and ward work.” It is somewhat curious to read in the Commissioner's entry that only a proportion of those treated in the Sanatorium were suffering from phthisis, the other patients being of various forms of mental affection which would otherwise prove intractable. Science has verily done much of late to alter opinions as to the dangers of association with phthisis.

Some Scottish Royal Asylums.

The Crichton, Dumfries.—A valuable part of this report consists of a long and interesting account of the travels of a Committee of Managers, accompanied by Dr. Easterbrook, who inspected many of the most advanced asylums in the United Kingdom and on the Continent for the purpose of getting new ideas for the promotion of research work in the new laboratory. The general outcome was that, taking all the objects of an asylum into consideration, the Crichton is in a position to compare favourably with anything they saw elsewhere. On the Continent there was much to praise, but also there was seen treatment that did not commend itself. On this the Committee was naturally silent. Dr. Easterbrook himself remarks that, though in the University centres there is much research work done, in the German asylums themselves this is not the case, in spite of well-equipped laboratories. Reading between the lines we imagine that in other asylums beyond the seas it is found that the work of administration has to be reckoned with, and is apt to interfere with the pursuit of pure science.

Three Crichton Fellowships have been instituted. Dr. Maloney obtained that for the study of clinical neurology and psychology; the other two, for pathology and bacteriology, and for pathology and chemistry, have not been filled up.

Dr. Easterbrook has adopted a scheme of classification which is entirely his own. We must confess that many of his details raise a strong spirit of criticism. A man who makes a new classification is like a soldier storming a fortress. He must expect to be shot at by those who are concerned in maintaining that fortress, however much the latter may stand in need of repair. As usual no one system is adopted, and symptomatic, clinical, ætiological and pathological elements are in evidence. As usual, too, the two old varieties of mania and melancholia contain the greatest number of the admissions—in this case forty-eight out of 104 acquired insanity admissions. They appear to be baskets into which cases with broad features, but incapable of either symptomatic, ætiological or pathological analysis, are incontinently thrown. More's the pity. If they are kept up at all they should have the company of all cases bearing their general features. Are we to conclude that none of the delusional and hallucinatory or the volitional and impulsive cases partake of either of these types; that they are all decent, cheerful bodies, none dangerous or suicidal? For management purposes such a conclusion would probably be inconvenient, while, for scientific purposes, it is obviously incorrect to set up definite classes which may include those who, partly or entirely, can be placed elsewhere. We note, too, that fixed unsystematised delusional and hallucinatory insanity has appended to it the equivalent of monomania. The characteristic assigned to this classical appellation by Esquirol, its inventor, was partial lesion of the intelligence, the affections or the will. Is such partial lesion confinable to a general delusional status? If one takes the idea suggested by the first part of the term, which most follow instinctively, then would it not be more applicable to the next class, the systematised delusional status? Then many classes are returned as insanity associated with such or such a somatic pathology. We have already dealt with the inconveniences of this practice, but here we find general paralysis termed as "insanity associated with general paralysis with insanity." The appended words tie one down to the assumption that there are cases of general paralysis not associated with insanity. Can this be? Possibly a man who had fractured his cervical vertebræ might be said to be generally paralysed for a few hours, but would that condition be treated as a clinical entity? It is not to be denied that no classification can be satisfactory to the full, simply because it is impossible to use one basis for all cases, whether we chose ætiology, pathology, symptoms, or a broad clinical aspect as the basis. That being so, it seems to follow that the general adoption of one, even an empirical basis, however incorrect, is preferable to that of one which cannot be correct for the reasons given above, and which cannot by any manner of means be worked into harmony with the work of others.

Gartnavel, Glasgow.—Adverting to the preponderance of single females among the admissions, Dr. Oswald writes:

The preponderance of single women over single men in the admissions has been more marked in the statistics of this hospital during the last decade than in the decades ending 1880 and 1890, but, as during those earlier years a different class of patient socially was being admitted, I have refrained from instituting a further comparison. I will only say that this relative increase in the number of single women admitted may have some reference to the ever-widening sphere of woman's work, and to the stress such work frequently entails. The occurrence of general paralysis of the insane in men, and the comparative infrequency with which conditions of puerperal sepsis causing insanity are now met with in women, help to account for the male married admissions being in excess of the female to the extent of 10 per cent.

The figures for 1910, on which these remarks are founded, are—

	M.	F.	T.
Single . . .	25	34	59
Married . . .	33	20	53
Widowed . . .	1	6	7
	—	—	—
Total	59	60	119

Undoubtedly these figures, though small in amount, are remarkable. For all England the admissions showed almost equality between single males and single females. Not only that, but the married admissions were nearly twice as many as those of the unmarried, the division between the sexes also being nearly equal. Among 3,167 admissions in the London County asylums the female unmarried were in quite small excess over the males, while there was but little difference between married and unmarried. At Morningside the single males outnumbered the females, but, as at Gartnavel, the unmarried were in excess over the married in both sexes.

With regard to the ever-widening sphere of woman's work, it is somewhat surprising that that maddening business of the telephone does not claim more victims. In England only 5 out of a possible 9,256 went to an asylum, and the group contains telegraphists as well as telephonists.

Morningside, Edinburgh.—Dr. Robertson, in chronicling a declining rate of alcoholic causation, draws attention to the disquieting feature of alcoholic insanity among females. The percentage on female admissions has risen during the last three years from 7·5 to 9·8; and now to 11·2. He thinks that it would appear that the working man is spending more of his money now on harmless amusements and entertainments, which have become a marked feature of late years. He has no doubt from experience that they conduce to sobriety. We have often thought the same in regard to the railway bookstalls with their countless variety of papers and magazines. These cannot all be for the affluent. He has not found that the two elections through which the nation has recently passed, have made much effect on the weak brains. As he truly says, politics nowadays do not excite any but a shallow interest. He allowed two of his patients to vote. He relates that a patient was sent by his own doctor to attend all the political meetings in the town, to cause distraction in the course of melancholia. The result was not beneficial. Another of his patients was made ill by the election, but that was because her rooms were next to a committee room and she got no sleep.

Mention is made of three interesting cases of recovery being directly due to the use of thyroid : one for myxœdema, another for goitre, and the remaining one on account of stagnant insanity. In the latter case similar treatment had been equally successful fifteen years before. He quotes recovery during the year of long-standing cases over five, six, seven, and fifteen years' duration as an argument against the proposed legislation for divorce. Dr. Robertson points out how suited lady doctors are for research work on account of their dexterity in delicate manipulation, and their patience and great attention to detail.

In remarking about the care and treatment generally of patients, he says that in very exceptional cases such as arise from surgical necessity or from tendency to self-mutilation he considers the use of mechanical restraint to be justifiable.

Part IV.—Notes and News.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

SPECIAL MEETING.

A SPECIAL MEETING of the Association was held at the Rooms of the Medical Society of London on Monday, November 20th, 1911, under the presidency of Dr. W. R. Dawson, for the purpose of considering :

A. The Diplomas in Psychological Medicine and other Special Qualifications in Psychiatry in their relation to existing Medical Officers of Institutions for the Insane.

B. The Status of Assistant Medical Officers.

Present : Drs. Fletcher Beach, G. S. Blandy, C. H. Bond, David Bower, J. T. Briscoe, Robt. B. Campbell, James Chambers, M. A. Collins, Maurice Craig, Thos. Drapes, B. Hart, John Keay, R. Legge, H. C. MacBryan, P. W. Macdonald, H. J. Mackenzie, E. Mapother, Jas. Middlemass, R. C. Monnington, H. Hayes Newington, Bedford Pierce, R. G. Rows, Geo. H. Savage, J. G. Smith, R. Percy Smith, W. H. Stoddart, J. G. Stuart, F. R. P. Taylor, D. G. Thomson, Hill Wilson White.

The PRESIDENT : The meeting to-day has been summoned by me in consequence of a resolution which was passed at the meeting of the Northern and Midland division at Boreatton Park last month. It seemed to me to be a desirable thing to have a special meeting, partly because our ordinary meetings are always so crowded with business, and partly because of the intrinsic importance of this subject, which really involves a review of the whole status of the medical officers of asylums in Great Britain and Ireland. I do not intend myself to go into the subject now, beyond explaining to you why it was that this meeting came to be called. The discussion will have to be more or less informal to-day, because we have met here now mainly to ventilate our ideas in the hope that some measure or measures will crystallise out which will be of service to us and forward the cause which we have in view. Dr. Bedford Pierce, because he moved the resolution at the Northern and Midland divisional meeting, is the most appropriate person to open the discussion, and therefore I call upon him.

Dr. BEDFORD PIERCE : We are, I think, all agreed that the policy of the Association in respect to the Diploma in Psychological Medicine should be most cordially supported and welcomed. The memorandum or circular letter of the Association to all the teaching bodies has met with a very encouraging

response. Four universities have already instituted a diploma, and the College of Physicians has agreed to the endorsement of the certificate of membership. We believe another university, that of Cambridge, is on the point of instituting a diploma, and there is no doubt that the matter has taken good hold of the medical authorities throughout the country. There are, however, certain difficulties which arise, many of them serious, directly we come face to face with the subject. What is to be the position of existing medical officers? How are they to obtain the Diploma? How can the senior ones get leave of absence to enable them to study for it? The Sub-Committee appointed by the Education Committee have given serious attention to these questions, and they felt the subject was so important that a special meeting of the Association should be held to consider the difficulty. I myself think that probably the best plan would be to ask that Sub-Committee to give further consideration to the subject, and to strengthen the Sub-Committee by the addition of a greater number of assistant medical officers. Moreover, it will be well for special attention to be given to the matter at branch meetings throughout the country. It is very difficult for many members, especially assistant medical officers in the north of England, to come to London to attend a special meeting. The difficulty is even greater for assistant medical officers in Scotland and Ireland. Nothing should be done in a hurry; there is no need to press forward at a great pace, and we must consider the claims of everybody. It is necessary, therefore, that what is done should be done wisely and done well. I, for one, would deprecate most strongly any pressure of the Association to lessen the value of this Diploma, by reducing the standard and making it easy to obtain. It is important that the standard of the Diploma should be high, and simply because it is difficult for assistant medical officers to get it under existing conditions we should not lessen its value and importance. I do not see a way out of these difficulties, but we should face them frankly, and endeavour to solve the problems which are arising. I have not spoken of the position or the status of medical officers, which seems to me an independent subject. One realises there are genuine disabilities and grievances. It is obvious that if two people are to ride on a horse at the same time one must ride in front of the other; but that is no reason why one of them should be tied underneath when they journey together. I much hope something can be done to improve the professional status of the assistant medical officer. Perhaps these few remarks will be considered a sufficient introduction to the discussion.

The PRESIDENT: Before we go further I will ask the Secretary to read a number of letters which he has received on the subject.

Dr. BOND read communications from Drs. Soutar (Barnwood House), East (Morpeth), Gane (Sunderland), E. S. Simpson (Beverley), Donelan (Napsbury), and a suggested resolution from Dr. Winifred Muirhead (Morningside).

Dr. BOND: I know Miss Muirhead's point is that at Edinburgh no women can attend University classes for graduation in medicine, but there is nothing to prevent them attending post-graduate classes in the University. She wants us to urge that the Diploma in Psychological Medicine shall be regarded as a post-graduate diploma in order that this difficulty about women attending the necessary classes shall be overcome.

Dr. ROWS read a paper entitled "The Development of Psychiatric Science as a Branch of Public Health" (see p. 25).

The PRESIDENT: Another aspect of the case is dealt with by Dr. Orr, and I think it will be best for us to take this paper now, and then discuss the two together.

Dr. ORR read a paper entitled "Some Points Complementary to the Institution of Post-Graduate Instruction in Psychiatry" (see p. 39).

The PRESIDENT: Gentlemen, these two papers, and the remarks of Dr. Pierce, open up a very wide field for discussion, all of it more or less germane to the subject. One was struck, and most favourably impressed, by the attitude which has been taken throughout these papers, namely, that all the measures which are suggested for reorganising the medical service of the asylums and for giving to assistant medical officers a better position are urged in no trade union spirit. The treatment of the patients is the *ultima ratio*, the final appeal, the reason for all that we do; and it is from the point of view that in these ways can we best secure proper treatment of mental disease that these different measures are being urged

upon us. Dr. Rows has pointed out methods by which asylum medical officers may be most effectively educated and trained for their special duties, and by which the treatment of the patients can thereafter best be carried out; and Dr. Orr has supplemented this by pointing out that unless we make the conditions of service for the younger members of the asylum medical staffs sufficiently favourable to attract the best class of men, we shall in vain make regulations regarding their education. The subject for discussion is before you, gentlemen, and we shall be pleased to hear any remarks which any member may wish to make.

Dr. D. G. THOMSON: The members may know that I have been one of the members of the Sub-Committee, who have taken a great deal of interest in one department of the subject which has been raised to-day, and which has been very well put before you by the three previous speakers. I take it that we have come to-day more to discuss practical details connected with the Diploma than wide schemes for establishing clinics in this country. I understand that one of the difficulties, for example, which Dr. Orr announced, is the plain common-sense question any assistant medical officer would ask himself, "What am I going to get for this expenditure of money, time and brains?" I think it is quite probable that he will get a *quid pro quo* even looking at the matter from this utilitarian standpoint. Whoever obtains this Diploma will surely be a more highly valued member of the staff by his employer than one who is not so trained. And I do not think that any reasonable committee—and the majority of them, after all, from all I have heard, are reasonable—would fail to recognise the superior training and abilities of a qualified medical officer in the same way, and let us hope to a much more substantial extent, than they now recognise the difference between trained and untrained nurses. Also, though I do not know other committees to the same extent as I know my own, I should think that if the committees felt that there was a desire on the part of assistant medical officers to have the necessary leave in order to obtain those diplomas, under certain conditions they would grant it. I am fairly sure mine would. Whether it would be done, as in the Services, on half pay, or whether if on their return from their absence on leave, if they had obtained the Diploma, they would at once proceed to a higher scale of remuneration, I do not know. But I think it is stated on the agenda paper which summoned this meeting—"there is suggested for special consideration the desirability of issuing a memorandum to Asylum Committees and other authorities concerned, urging upon them the importance of providing assistant medical officers with facilities for further study at university centres by granting study-leave, which should be not less than six months." That period has been variously stated. Some say three months in each of two years. I think, to be practical and come to the point, the question for this meeting to consider is whether it should not be referred to this Sub-Committee, with, possibly, more added to their number, as Dr. Bedford Pierce suggested, to draw up for the approval of the Association some such memorandum. The Sub-Committee was authorised to approach the Commissioners in Lunacy to get their advice, and, more than that, their recommendation, and that, from the Commissioners to the Committee, would surely have considerable weight. With regard to the wider question of making the Service a central service, a Government service, there are many pros and cons to be urged on both sides—a local service as against a Government service. But we are promised by this fertile Government that there is to be legislation on the subject of the feeble-minded at no very distant date, and I think it will be well for this Association to have some kind of programme ready, so that we could give evidence before any legislation was embodied in such a Bill. So I look to this legislation on the feeble-minded to attack the larger problems of the establishment of clinics, and other wider questions of that sort, questions which we, individually and locally, cannot deal with. I had great pleasure in hearing Dr. Orr's paper, but I cannot quite follow him about the demand for a more legal status for assistant medical officers. I was an assistant medical officer for the average number of years, and I never felt I was such a cipher or nonentity as he describes the assistant medical officer to be. I felt my responsibility for the section which was allotted to me. I was pleased that I had a chief to fall back upon at the same time, to instruct, support or advise me in difficulties. It may have been that I had the good fortune to have excellent chiefs, but I cannot follow him in that contention. As Dr. Pierce said, if two have to ride a horse, one must ride in front, and if you get a "gentleman"

for an assistant medical officer and a "gentleman" for the chief, a "gentlemanly" feeling will prevail between the two, apart from legislation or statutory recognition of one man compared with another. But with everything else he said I am in thorough sympathy. I think we should address ourselves more to the suggestion in the memorandum to get to business practically, and consider whether some memorandum might not be drawn up, or some powers given to the Sub-Committee, to draw up a memorandum for the approval of the Association, or in the first instance of the Education Committee to send to committees of asylums. Committees are anxious, as far as I know, to be made acquainted with these matters. They do not know them, and any movement of this kind would interest them and concern them. In order to give practical expression to what I have said I shall be prepared to move a resolution to that effect, that the question of framing some memorandum for the approval of the Educational Committee and the Association generally be considered. The Secretary has kindly worded something for me as follows: "That the present Sub-Committee of the Educational Committee dealing with the establishment of diplomas be enlarged by the addition of a further number of members, the majority of whom should be assistant medical officers, and that their reference should be enlarged to include the consideration of the status of assistant medical officers, and the relation of the proposed diplomas in psychiatry to the existing medical officers of institutions for the insane." That seems to me to be capable of condensation and a little alteration. But I accept it after it has been edited a little.

Dr. DRAPES: I second it. The two most valuable papers we have listened to set one furiously to think, and as far as the Association is concerned I think every one of us will probably agree with everything which has been urged in the two papers. But the practical point for us is how to get the suggestions there made carried into effect. Dr. Thomson has properly spoken of the necessity for educating committees, and I think the matter should go further and that the general public will have to be educated on the subject. I know in Ireland committees are very much at the mercy of the men who appoint them—the ratepayers—and unless the general public, in the first instance, are convinced that such measures as have been urged are for the improvement of the asylum service, we may not get far. The public could be informed by means of articles in the press, or in our high-class magazines, in order to bring home to them the truth of the situation. Otherwise what we decide here will not go beyond ourselves.

Dr. PERCY SMITH: I ask for the resolution to be re-written. I think we are rather getting this meeting into a tangle, that is, with the Sub-Committee and with the Educational Committee. The Educational Committee has not yet received the report of its Sub-Committee; it is to receive it to-morrow. It covers some of these matters which have been discussed to-day. Presumably the business way is for the Educational Committee to bring the matter before the Association. It is totally informal to refer to the Report to-day, because it is not before this meeting; but I have it in my hand, and it is there suggested that the Educational Committee should recommend the Council to call a special meeting of the Association. We are already holding a special meeting called by somebody else, and therefore we should be most careful in regard to any resolution which we pass to-day, because any resolution should be referred to the Council or to the Educational Committee; this special meeting should not directly instruct the Educational Committee, but everything should go through the Educational Committee. Apart from that, I am extremely disappointed not to hear any assistant medical officers speaking, though two papers have been read. I hoped that this debate would be largely conducted by assistant medical officers. One may say, as regards the papers of Dr. Rows and Dr. Orr, that as far as this Association is concerned they are forcing an open door. Their papers ought to be read before the County Councils Association that these bodies may begin to understand what they have to face in the way of providing larger staffs for the asylums, better pay, and a better status altogether. I am fully in sympathy with that. One knows that abroad, asylums are staffed by a much larger number of men, and therefore their time is not so entirely taken up by exhausting routine work, and, of course, they have the opportunity of being married and living in or about the institution in houses of their own. From the point of view of the ratepayer—there are very few in this room who are ratepayers, but I am one in the County of London—I am

looking with some apprehension upon an enormous increase of asylums staffs. But we know those things have to be done, and the ratepayer is always willing to put his hand into his pocket when there is really something beneficial to asylum service to be obtained by it. We should hear the views of some assistant medical officers on the question.

The PRESIDENT: May we have the resolution again, Dr. Thomson?

Dr. THOMSON: I was making some general remarks when this resolution was put hurriedly into my hands. I am not sure that Dr. Percy Smith has not pointed out the right course. It is a matter of some doubt whether at this special meeting we should pass resolutions about a sub-committee which was appointed by the Educational Committee, which said Educational Committee meets to-morrow to receive the report of this said sub-committee. One has every desire to be practical, and to get on to proposing something; but I think, on looking at this resolution, which I have not had time to study, and, indeed, I was not prepared with any resolution, Dr. Percy Smith's suggestion is right, and the matter should be referred to the Education Committee.

Dr. BEDFORD PIERCE: Surely it is competent for this meeting to appoint any Committee it likes, without reference to other bodies.

Dr. PERCY SMITH: But what a chaos it would be.

The PRESIDENT: It is not competent for this meeting to refer it to the Sub-Committee of the Educational Committee; but there is no objection to this meeting appointing a Committee with what membership it likes.

Dr. HART: I was going to propose an amendment to Dr. Thomson's resolution, but as I am not sure whether the resolution exists or not—[Dr. Thomson: It does not exist]—I will not do so. There are several things which I should like to say, from the point of view of the assistant medical officer in this country. It seems to me—

The PRESIDENT: Do you move a resolution? There is nothing yet before the meeting.

Dr. HART: I should like to say a few words on the subject, and subsequently to move a resolution. To anyone who compares the state of asylums and psychiatry in this country with that existing in Europe, there are two points which stand out very prominently, and they have been brought out in the papers which you have heard. As regards the administration of asylums, the comfort of our patients, and such like matters, Great Britain stands at any rate in the front rank, even if it is not in advance of any other country. On the other hand, from the point of view of scientific work and the professional status of the medical men who are concerned with this branch of medicine, the position of Great Britain leaves much to be desired. In the great reforms at the beginning of the nineteenth century, in which England took a very prominent part, the main forces which moved those reforms were the progress of science on the one hand, and the progress of humanitarianism on the other, and they worked hand in hand. But now, at the beginning of the twentieth century, these two forces seem to have been divorced. Humanitarianism and the reforms which flow from it are very much in evidence in England; but science seems to have gone elsewhere. ("No.") Not altogether, I admit. But I think it can hardly be doubted that scientific psychiatry in England is not on the same plane as it is in many other European countries. And that, I think, is through no fault, or no immediate fault, of the men who are concerned in it. We have individual men who are working strenuously for the progress of psychiatry, but quite sporadically as it were; there is no organisation of the science at all. The defects in the professional status of the asylum medical officer, the lack of attractiveness in his career, and the uncertainty of his future, have already been described in Dr. Orr's paper. The evidences of the inferior career which is offered to the man who goes in for lunacy are now, I think, becoming painfully apparent in the dearth of candidates for posts in the lunacy service. I think everyone will agree that the number of candidates is steadily becoming less, and the reason is not far to seek. One knows the attitude of the profession as a whole towards our speciality. It is not regarded with the respect which it ought to receive, and the promising student who informs a hospital physician that he proposes to adopt asylum work as a career is too often greeted with an astonished "Why?" The other special careers in medicine have steadily improved, from every point of view, within recent years, and the result is that lunacy, which has hardly improved as a career at all, is being

steadily left behind. Its various defects have already been pointed out: the methods of promotion, the part played by luck and influence, the forbidding of assistant medical officers to marry, and similar things. If you are going to try and get a better status for the medical man, and if you are going to ask from him a better qualification for his post, you must make it a career which will attract the better men from the hospitals. Dr. Percy Smith has said that the papers of Dr. Orr and Dr. Rows are endeavours to force an open door so far as this Association is concerned. I do not agree with that point of view. I think that it is not only a possibility for this Association, but that it is its duty to organise some method of obtaining reforms from those Committees and County Councils. The passing of the Superannuation Bill has shown the power which the Medico-Psychological Association is capable of exercising, and I have very little doubt that all those reforms which have been spoken of this afternoon could be carried through if this Association, as a whole, liked to exert itself. The objection is frequently raised that such reforms are impracticable, but that must disappear in the light of the fact that they are in actual operation in nearly every country in Europe, and in every country which claims to be in the front rank. As regards the organisation of psychiatry, the facilities for education, and the possibilities of future scientific research, we are decidedly inferior to Germany at the present moment, and inferior to most of the other countries of Europe. The whole question seems to me to present many points which can only be attacked more or less simultaneously. I do not think it is of any use trying to attack the question from one side at one time and from another side at another. I think the whole status of psychiatry in England hangs with the status of the medical officer, and that should be attacked simultaneously with the other points which have been raised. A wide-sweeping reform is necessary, and although we obviously cannot establish a wide-sweeping reform in this room, we can take the necessary steps to do what was done two years ago in the case of the Superannuation Bill, that is to say, organise a fight. And if we do that, I think the County Councils and the committees of asylums will soon do what is required of them. The question of clinics is not immediately relevant to the status of the medical officers; but indirectly it is very relevant. I do not see at the present moment how you will get your candidates for diplomas in this subject efficiently educated, because they have nowhere to go. They can all be educated in the side subjects, but the great majority have no opportunity of obtaining the necessary instruction in psychiatry itself. Clinics react upon the whole status of psychiatry in the country. They set a standard for work, they act as educational centres, they are in touch with the Universities and with the progressive scientific thought of the day. And, most important of all, they provide centres for that organised scientific work which is the hall-mark of the twentieth century. The sporadic work which we now have to depend upon is not an efficient way in which a first-class country can hope to get its science carried out. All these reforms are necessary and possible, if we will work for them, and the movement for reform must come from the profession and not from the County Councils. I think the movement should come from this Association, which represents our branch of the profession. I remarked earlier that I would move an amendment to the resolution. What I felt when that resolution was proposed was that a sub-committee of the Educational Committee is not the right committee to deal with a subject which is so very large. It extends far beyond the province which is legitimately assigned to that Committee. I should like to suggest that a special Committee be formed with the object of considering the whole question, obtaining from the various parts of the country the facts which bear upon it, making recommendations as to what can be done, and reporting to the Association with a view to the Association making an organised effort to improve the present state of affairs.

Dr. HAYES NEWINGTON: I have listened with very great interest to all that has been said, and especially to the two papers by Dr. Rows and Dr. Orr, and I cannot help thinking that this is rather an evilly drawn-up programme. It is bringing together two important subjects, one an enormous one, and the other a smaller one. They are inter-dependent to some extent, but you cannot take them both together. I understand that Dr. Bedford Pierce and those with whom he has worked are desirous of producing a diploma which shall be practically obtainable within the next few years—something of a feasible nature; but this second question concern-

ing the status of assistant medical officers, raking up the whole of the treatment of insanity, is a thing which cannot be dealt with for many years. We have had a great Commission on the treatment of the Feeble-minded which made a most excellent report, which everybody knows about, upon which everybody is ready to have legislation passed. But when shall we have that legislation? Any material alteration in the status of assistant medical officers, especially if they are going to be rendered independent medical practitioners inside the asylums, must mean a very large alteration in the Lunacy Laws, and a considerable modification in the proposals made by the Commission on the Feeble-minded. And it is idle to think that anything of that kind will be carried through in the immediate future, however hard we may work. Therefore if we expend our forces of debate this afternoon on the question of what the medical officer should get and should be, we shall lose sight of the principal thing which has brought us together, and that is how to take advantage of the offer of a diploma in psychological medicine. Speaking as a member of an asylum committee, I can say that if the question of giving gentlemen leave for six months were brought before the Committee, and we heard at the same time all this about the status of the assistant medical officer, we should say it is much too big a question for us at present, and we should put it on one side altogether. But if you have concrete proposals which aim at benefiting the condition of the patients who are under the charge of committees, they will be received cordially, and effect will be given to them, if possible. If a committee is to be appointed it should be instructed whether it shall deal with this whole grand question, or whether it shall deal with the question of a further diploma. I should be sorry to see anything like a central government of asylums, such as someone has advocated. Nothing would kill progress in asylum work more effectually than that: one pattern of medical officer, one pattern of pathologist, one pattern of everything. The good which has been done in this country has been accomplished by a number of people working out different ideas and putting them into practice in different ways. I think the result of this origination and attrition of ideas has been excellent, and that the superiority of our asylums depends entirely on the widest application of sound ideas emanating from varying sources.

Dr. STUART (Northampton): I travelled here seventy miles because I thought the subjects we were to consider were the status of assistant medical officers and the diplomas in psychological medicine. I would draw attention to the fact that it is the relation of these diplomas to existing medical officers which is put down on the agenda as the real cause for the calling of this meeting. That is the one marked (A). In listening to the other gentlemen who spoke, one cannot help noticing that medical superintendents seem to feel strongly that it is the duty of the assistant medical officers straightway to take this Diploma. As an assistant medical officer I see difficulties in my way regarding this. The Educational Committee have made recommendations, and certain universities have taken up the subject. That being so, it becomes an essential thing for those of us who are assistant medical officers to take this Diploma. The universities grant it; we are bound to take it if we are looking to our bread and butter. But the question arises, How are we going to take it? There is a suggestion that committees should give assistant medical officers six months' leave of absence, which means that my superintendent must ask his committee to give me six months' leave of absence—I suppose on full pay. Why? So that they may increase my salary when I have got the Diploma? Otherwise I see no reason why I should get it. With regard to the status of the assistant medical officer, I am an assistant medical officer at Northampton. It is an asylum with two assistant medical officers, and I am married. Many assistant medical officers are not allowed to marry, and that fact is to my mind degrading to the Medico-Psychological Association. We see advertisements in the papers for medical superintendents, and it is advisable that an assistant medical officer who puts in for the post shall say this: "I am married," or "I am willing to get married," or "I am about to be married." The plain English of it is that any man who becomes a senior assistant medical officer must consider it his duty to get a girl "in tow"; to keep her "in tow" from one to five or six years, although he may never be able to get married. What is the reason that assistant medical officers cannot be married? It seems to me the only possible objection belongs to the medical

superintendent. I cannot understand how committees can say that the second official in an asylum, looking after a place over which thousands of pounds are spent a year, is a man who must not get married. The patients may recover and go out, and they are free to be married; they can have been married before they come in. But there is one class of people in asylums who cannot be married, and that is the assistant medical officers. Returning to the subject of the diplomas, it seems, to my mind at all events, that some of the recommendations of the Educational Committee were unfortunate. They appear to have recommended to the College of Physicians that they grant a diploma. If the College of Physicians would not give the Diploma in Psychological Medicine to licentiates as well as to members, then it was not the business of this Association to press for a diploma at all. I would like to say in conclusion that it is possible for some people to look at this matter coldly, but as far as my own personal position is concerned, it is a thing which I cannot help looking at with considerable heat.

Dr. MACDONALD: I do not rise to say many words, but I wish to express my thanks to Dr. Rows for this most interesting contribution, which has covered a very wide field, and I regret that such a valuable paper could not have been read at a full meeting of the Association instead of a sparsely attended one like the present. I am in entire agreement with Dr. Rows that there are great difficulties in the way as regards degree-giving bodies being able to provide the necessary teaching material in connection with the proposed Diploma. It is well known that some authorities are much more liberal hearted than others, but I agree with Dr. Hayes Newington that if we are to get better treatment or improved conditions, then we must endeavour to carry the authorities with us and not to appear dictatorial. I would venture to repeat the very old saying that much of the slowness in promotion is due to the continued vicious system of building huge asylums. I agree with Dr. Thomson that there can be but one head unless we are to revert to the universally condemned system once in vogue in and around London. It does not matter to me what diploma a medical officer may possess or how many, for unless the officer possesses the spirit and desire to work, diplomas are valueless. All know what splendid work Dr. Rows and Dr. Orr have produced, and I presume I may say without fear of contradiction that no degree or qualification either of these gentlemen possess would have produced such splendid results without the fundamental spirit of work.

Dr. STODDART: With regard to the question which has been raised as to the College of Physicians, I may say that that body did the best they could for us under the circumstances. It appeared, when the matter was brought up, that the Diploma could not be granted by the College of Physicians without legislation. This, under the present full programme of Parliament, would have taken so long that the College of Physicians felt that they had to do something in the meantime in order to carry out our wishes as far as they could. They have not absolutely closed the door. When there is more time to deal with this important matter, I think that the College of Physicians may be willing to open the door to their ordinary licentiates.

Dr. BLANDY: As another assistant medical officer I should like to express a sense of obligation to those whose energy and initiative have ventilated this subject. My own superintendent (Dr. Rolleston) permits me to say that he is entirely in sympathy in any movement having for its object the improvement of the status of assistant medical officers. The question of the Diploma, as it affects the assistant medical officer, interests me very much personally. I am in the position of the man who wishes to take advantage of what has already been done with regard to it, and am anxious that something further may be done as soon as possible. It is largely a question of convenience in asylum administration. An assistant medical officer will approach his committee, and his superintendent will be asked to advise them in the matter. I would urge that the Association make to visiting committees a strong and detailed recommendation, as I feel that it would very much strengthen the hands of the superintendent if the committees know the considered view of the Association on the point. Will a medical officer find it difficult to take the Diploma if the facilities are granted? I do not know what it will cost him—perhaps £150. (A voice: "Not so much.")

Dr. MAURICE CRAIG: There is one point that we must not lose sight of, and that is, that it is absolutely necessary that we as an Association must face the

problem of how we are going to encourage men to take one of the various diplomas in psychological medicine now offered. The first question which clearly calls for a thorough investigation is the whole status of the assistant medical officer, and from all we have heard this afternoon it is very important that this should be gone into. Our one desire is to attract the very best men to take up this special branch of medicine, therefore we must be able to offer a reasonable chance of success to anyone taking it up. We have heard various assistant medical officers speak this afternoon, but indeed there is no need to hear them, for statistics alone prove that as a service it does not promise more than a small percentage of superintendencies, therefore the majority can never reach the highest positions. This, I know, is impossible for us to remedy, but in my opinion the inability to obtain a large number of applicants and a good class of applicant for the junior posts is not due merely to the poor chances of high promotion. I think that we can put that clearly out, for we know that the great services are underpaid and also offer only poor chances of high promotion, yet when the R.A.M.C. was put on a proper footing, and the status of the men made more satisfactory, good class candidates at once appeared. For our men, one of the greatest objections to the present system—and I think a very reasonable objection—is that there is no hope for an assistant medical officer being able to marry within a reasonable time. Senior assistant medical officers should after a certain number of years' service have a house or married quarters granted to them. This is clearly one of the crucial points which must be decided. Unless superintendents feel that they can influence their committees—and I, for one, believe that most superintendents have no small power with their committees—the position is serious indeed, as I can see no hope for an improved service. In any case it is a matter which should not be brushed aside lightly. We, as an Association, have approached various universities, and we have asked them to grant us diplomas in our branch of medicine. Several of these diplomas have come into existence, and it is now our duty to see that men enter for them, and this can only be done by making the service an attractive one. If we now fail I cannot help feeling that the Association will be placed in a foolish position. One thing is certain—that men will not enter for the diplomas unless it shall be greatly for their benefit to do so.

Dr. HART: I move that a committee be formed to consider the status of the profession of psychiatry in Great Britain and Ireland, and the reforms necessary in the education and conditions of service of the assistant medical officer.

Dr. M. A. COLLINS: I second it.

Dr. HAYES NEWINGTON: What will the relation of that motion be to (A) on the programme? I suppose I may take it that ninety-nine out of one hundred came here to discuss that question. That brought me here—the work of the Committee in giving the Diploma. I think that is the principal thing that is in the mind of the meeting. And here is the other question. Which is the most important thing? I take it that this motion as it stands now will entirely defeat the Committee on diplomas. Does the meeting want that? Or can anybody move a resolution to a parallel effect to (A)?

Dr. HART: Could not the wording be altered so as to exclude the matters now before the Educational Committee? I am anxious not to trespass on the Committee already in existence.

The PRESIDENT: I think it covers the question of the diplomas.

Dr. HAYES NEWINGTON: But will it not have the practical effect which I have mentioned? We came here for the practical purpose of trying to further the work which has been undertaken so well by a committee of very experienced University men, who wish to see a diploma granted. The question of status may be part of the whole, and probably Dr. Craig is right in saying they are indissolubly connected. They may be, but assuredly if you attack the big principle and keep it in abeyance for years, it must follow that the smaller practical work must be put on one side for that time. If you cover the two by one motion you cannot possibly deal with the feasible part without dealing with the more important question.

Dr. HART: I am anxious not to interfere at all with the work of the Sub-Committee of the Educational Committee. I do not know how it stands technically, but I should have thought there was nothing to prevent that Committee proceeding with its work. Diplomas have already been instituted by certain Universities, and the committee I have suggested deals with something which, as Dr. Hayes Newing-

ton says, is in the future. I do not know whether it is true that the passing of a resolution like this would defeat the work of the Educational Committee. If it is true I would alter it in some way, because I am anxious it should not be so. I think we should support the establishment of the diplomas, but unless we regard it as a first step of a more far-reaching reform, the thing will not be of the value which we hope it will be. Is it not possible for the wording of the resolution to be corrected in some way so that it will cover what we want?

The PRESIDENT: The resolution is—"That a committee be formed to consider the status of the profession of psychiatry in Great Britain and Ireland, and the reforms necessary in the education and conditions of service of assistant medical officers."

Dr. BEDFORD PIERCE: Leave out "education" and then it will be all right.

Dr. STUART: On a point of order, sir.

The PRESIDENT: Would it cover your meaning if the word "education" is left out? Would the remainder of the resolution express your views, Dr. Hart?

Dr. HART: It does not altogether, but if it is inevitable, I would rather have that than nothing.

The PRESIDENT: I should like to take the views of some others, whether it will affect the granting of the Diploma.

Dr. STUART: I rise to a point of order. Is not that resolution out of order, inasmuch as this meeting has not been called to consider the position of psychiatry in this country, but the diplomas in their relation to assistant medical officers and their status.

The PRESIDENT: The meeting has been called to consider the status of the assistant medical officer, and the resolution does refer to that subject.

Dr. ORR: Would it be acceptable if the present Sub-Committee of the Educational Committee were to take on this work, and extend it to include the position of the medical officers?

The PRESIDENT: It would not be in order for us to do that at this meeting.

Dr. ORR: It could be done at our meeting to-morrow.

The PRESIDENT: The Educational Committee could do that.

Dr. HAYES NEWINGTON: There are two subjects (A) and (B). With regard to (A), if this meeting were to request the Educational Committee to take such steps as it thought fit to promote the object of (A), well and good; but keep that independent. On the top of that, if you like, move your big resolution (B), and keep that to itself. That expresses what I want to get at.

Dr. CRAIG: May I move an amendment. It is: "That, as a natural corollary to the work now being done by the Educational Committee regarding the establishing of Diplomas in Psychological Medicine, a sub-committee be appointed to go into the matter and make recommendations regarding the improvement possible in the status of assistant medical officers."

The PRESIDENT: A sub-committee to what committee? We can appoint a committee from this meeting.

Dr. CRAIG: It could be a committee from this meeting.

Dr. ROWS: Could not the Sub-Committee of the Educational Committee approach the asylum committees and other authorities? Still this meeting could appoint a fresh committee that could go into the larger question which Dr. Hart proposed.

The PRESIDENT: Certainly, and keep the two matters apart.

Dr. ROWS: I cannot see why there is this entanglement. It has nothing to do with Dr. Hart's proposal. It considers the desirability of issuing a memorandum to asylum committees and other authorities. Why not do that to-morrow at the meeting, and let this meeting appoint a special committee, as Dr. Hart suggests, to consider the larger question which has been brought before the meeting to-day?

The PRESIDENT: I think Dr. Rows is under a misapprehension. That which he refers to is merely a suggestion for this meeting. This is a special general meeting of the Association, and the desirability of issuing a memorandum was only suggested as one of the things which might be decided on here, but there is no committee recommendation on the subject.

Dr. ORR: So this special meeting has not the power to elect a special committee?

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The PRESIDENT: Yes, it has.

Dr. THOMSON: We are getting into deeper muddles, and I would like to follow Dr. Percy Smith's suggestion that we defer this matter. We have had the benefit of the special meeting and of hearing valuable papers and valuable views, and I move that the subject be postponed or closed, at all events until the general meeting to-morrow. I move it as an amendment if necessary. It is unfortunate that this meeting was called for the day before the meeting to-morrow, instead of the day after it.

Dr. MIDDLEMASS: I would like to support the suggestion that this meeting be adjourned. We have heard to-day from very few assistant medical officers. My own assistant medical officer was anxious to attend this meeting, and as Dr. Thomson has just said, it was rather inconvenient to have this meeting the day before the Quarterly Meeting. He could not be here to-day and I be present to-morrow, and it is essential that this question, which largely concerns the assistant medical officers, should be discussed, or an opinion expressed upon it by assistant medical officers. We have had several valuable opinions, but it would not be at all to the prejudice of the settling of it if a thorough opportunity were given, say by Divisional meetings, to hear more fully the opinions of assistant medical officers; and that would get over the difficulty which exists of the Educational Committee having a report to present to-morrow which we cannot consider to-day. I think there is no part of the subject which will be prejudiced by a little further delay.

Dr. HAYES NEWINGTON: What is to be adjourned, both (A) and (B), or only (B)?

Dr. THOMSON: I propose to adjourn both (A) and (B) until after to-morrow's meeting.

Dr. STODDART: As you have ruled Dr. Hart's motion in order, I have—

The PRESIDENT: There is an amendment first.

Dr. BEDFORD PIERCE: I hope this matter will not be postponed; I think it is a very serious matter, and it would be serious not to consider fully the legitimate aspirations of many of our colleagues. The feeling up and down the country on the matter is much stronger than many of us are aware of as to the disabilities of assistant medical officers and there can be no harm in appointing a committee, and I shall support Dr. Bernard Hart's resolution and oppose the amendment.

Dr. BOND: I rise to support Dr. Bedford Pierce, because I think the current of feeling on this matter is running strongly, and the question is a burning one. Anything in the nature of a sharp adjournment, after such a meeting has been called, will have an unfortunate effect. If there is some other practical suggestion such as only postponing action for a brief time—for instance, until to-morrow's meeting—I see no objection; but if this is to be a more or less indefinite adjournment, leaving it for the Divisions to thresh it out, I am sure bitter disappointment will be felt by many to whom this question is a burning one. I have not spoken this afternoon before, but I have listened with the greatest interest to all that has been said. I emphatically associate myself with this movement which is on foot to better the conditions of our assistant colleagues, because I feel that, as Dr. Craig has said, the success of our new Diplomas and the general advancement of education in psychiatry are bound up with it. We shall not get men willing to try for these Diplomas unless they feel that they have a reasonably assured career in front of them.

Dr. COLLINS: I seconded the motion. I am particularly anxious that the matter should not be postponed, and I feel that it is the key to the whole subject, and that we shall not get the Diploma gone in for in the existing conditions. I think the key to the whole matter lies in (B), and I hope this meeting will do something practical to-day.

The PRESIDENT: The amendment is, proposed by Dr. Thomson and seconded by Dr. Middlemass, that the subject be postponed.

The amendment was lost.

Dr. CRAIG: I now propose—"That as a natural corollary to the work now being done by the Educational Committee regarding the establishing of Diplomas in Psychological Medicine, a committee be appointed to make recommendations as to what facilities can be obtained for assistant medical officers obtaining such Diploma."

Dr. BEDFORD PIERCE: With regard to that first part, our work falls into two groups. I suggest that the first part be referred to the Educational Committee

to-morrow, and that we spend no further time on that, but deal with the second part.

Dr. STUART: I second Dr. Craig's proposal.

The PRESIDENT: There is an amendment that the first part of that be referred to the Educational Committee.

Dr. COLLINS: I second that.

Dr. HAYES NEWINGTON: The effect of Dr. Craig's words being moved as an amendment would be unfortunate; it deals with what we want as relating to (A). But if it is passed as an amendment the original motion which deals with it will kill what we want with regard to (B). If the Chairman will allow it to be put as an original motion as to (A), we shall get clear of that because naturally (A) would come before (B).

The PRESIDENT: I am in the hands of the meeting.

Dr. HART: I should be pleased to postpone my motion for the time.

The PRESIDENT: Dr. Hart is allowed to withdraw his motion.

Dr. CRAIG: My resolution is—"That as a natural corollary to the work now being done by the Educational Committee regarding the establishing of Diplomas in Psychological Medicine, a committee be appointed to make recommendations as to what facilities can be obtained for assistant medical officers obtaining such Diploma."

The PRESIDENT: That has been proposed by Dr. Craig and duly seconded.

Dr. BEDFORD PIERCE: I do not want to be obstructive, but this is exactly what the Sub-Committee of the Educational Committee has been attending to, and I should have thought it would have been better to refer this question which Dr. Craig suggests to the Educational Committee to-morrow. We have arrived at this position because this special meeting is being held before that of the Educational Committee. I suggest an amendment that question (A), namely, referring to the Diploma in Psychological Medicine, be referred to the Educational Committee.

Dr. COLLINS: I shall be glad to second that.

Dr. HAYES NEWINGTON: You want to refer with the recommendation. This Association is asked to speak in this meeting with a voice, and that voice is expressed by Dr. Craig's motion.

Dr. BEDFORD PIERCE: We want to say, How will this Committee which Dr. Craig suggests stand in relation to the existing committee? I think it should be referred, without any views, to the Educational Committee.

Dr. HAYES NEWINGTON: But we want to take advantage of the discussion this afternoon, and instruct the Committee to take action. That is the object of Dr. Craig's motion.

The PRESIDENT: I put Dr. Bedford Pierce's amendment, which means that part (A) be referred to the Educational Committee.

This was carried.

The PRESIDENT: I now put it as a substantive resolution that the subjects referred to under (A) be referred to the Educational Committee.

Dr. HAYES NEWINGTON: Will he allow words to be put in expressing approval of the issuing of the memorandum?

Dr. BEDFORD PIERCE: Yes.

Agreed to.

The PRESIDENT: Perhaps if Dr. Craig and Dr. Pierce will confer it might get over the difficulty. Dr. Hart's previous resolution is: "That a committee be formed to consider the status of psychiatry as a profession in Great Britain and Ireland and the reforms necessary in the education and conditions of service of assistant medical officers."

Dr. COLLINS: I second that.

The resolution was carried unanimously.

Dr. HAYES NEWINGTON: That will necessitate the appointment of a committee. The appointment of a committee to carry out such an important reference should be done with very great care. It would certainly be very unfortunate to try and choose the committee now, and I would point out that on former occasions, where the Selection Committee has not been able to meet and make recommendations to the Council, that the selection has been made by the ex-President, the President, and the President-elect, three gentlemen who are all eminent, who

must be eminent, or they would not have been elected to our chair, and these on this occasion happen to represent the three divisions of the United Kingdom. So there need not be any alarm. I suggest that the naming of the committee be left to the three Presidents.

Dr. J. G. SMITH: I should like to add the General Secretary to the list.

Dr. COLLINS: I second that.

Dr. STODDART: I second Dr. Newington's proposal.

Carried with the addition of Dr. Bond's name.

Dr. HAYES NEWINGTON: Then there is the question of the size of the committee. It is very important to know what the size will be.

The PRESIDENT: We shall be glad to have any guidance you may give us.

Dr. STODDART: Would it be unusual to suggest that the gentleman who proposed the motion should be on the Selection Committee?

The PRESIDENT: Individuals had better not be named.

Dr. MIDDLEMASS: I suppose there will be a certain number of assistant medical officers on it?

The PRESIDENT: Yes.

Dr. COLLINS: I think not less than half the committee should be assistant medical officers.

The PRESIDENT: You may rely upon it that the assistant medical officers shall be properly represented.

The PRESIDENT then read out the terms of Dr. Pierce's amended resolution: "This meeting strongly urges the importance of necessary facilities being provided to assistant medical officers of asylums for obtaining the Diploma in Psychological Medicine or other Special qualification. This question is referred to the Educational Committee in order to give effect to the expressions of opinion at this meeting."

The amended resolution having been accepted, the meeting then terminated.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE QUARTERLY MEETING was held at the Rooms of the Medical Society of London, on Tuesday, November 21st, 1911, under the Presidency of Dr. W. R. Dawson.

The minutes of the last meeting having appeared in the Journal were taken as read, and were confirmed.

The President (Dr. W. R. Dawson) and the following sixty-one members were present: T. Stewart Adair, G. F. Barham, Fletcher Beach, C. H. Bond, David Bower, A. Boycot, R. B. Campbell, J. Carswell, James Chambers, W. C. Clapham, M. A. Collins, W. E. Collier, Geoffrey Clarke, Maurice Craig, G. Cribb, A. W. Daniel, J. Dixon, Sir Horatio Donkin, C. Dove, E. L. Dove, Thos. Drapes, J. H. Earls, Sam. Elgee, C. T. Ewart, J. J. Fitzgerald, H. Haynes, David Hunter, J. B. Hyslop, G. Johnston, Robert Jones, John Keay, H. Kerr, R. Langdon-Down, L. Legge, H. Wolseley-Lewis, J. R. Lord, T. W. McDowall, H. J. Mackenzie, C. Mercier, Jas. Middlemass, Alf. Miller, W. F. Nelis, H. Hayes Newington, M. Eden Paul, J. E. Porter-Phillips, J. F. Powell, Wm. Rawes, Geo. M. Robertson, Geo. H. Savage, J. G. Secretan, G. E. Shuttleworth, R. Percy Smith, J. B. Spence, T. E. K. Stansfield, R. H. Steen, R. J. Stilwell, H. H. B. Stoddart, J. Tattersall, J. D. Thomas, D. G. Thomson, Wm. Vincent.

Visitors at the above were: Drs. J. M. Sargeant, C. F. A. Vivian, W. Watson, and J. C. Wootton.

Members of the Royal Society of Medicine, Obstetrical Section, at above: W. H. Bailey, J. Barris, H. Briggs, J. F. Briscoe, Hayden Brown, John Cahill, E. O. Croft, F. G. Crookshank, H. P. Dimmock, T. W. Eden, W. S. A. Griffiths, J. P. Hedley, G. E. Herman, H. Macnaughton Jones, Amand Routh (President), A. W. Russell, Mary Scharlieb, Heywood Smith, J. H. Targett, W. W. H. Tate, May Thorne, Ethel Vaughan-Sawyer, Jane Walker, J. A. Willett, Robt. Wise.

Visitors at above: Drs. Emily MacRedy and C. StA. Vivian.

THE LATE DR. G. FIELDING BLANDFORD.

The PRESIDENT said his first duty that day was a sad one, namely, to allude to the death of Dr. George Fielding Blandford, one of the oldest members, and a former President, of the Association. His figure was a familiar one at their meetings; up till two years ago he took a deep interest in everything which concerned the welfare of the insane, and his opinions always commanded the respect of his audience. He was well known to be a warm-hearted friend. His death took place at the time of year when most medical men were away on their holiday, but his funeral was attended by some of their officials, and a funeral wreath from the Association was sent. He proposed that a vote of condolence be sent by the General Secretary to Dr. Blandford's family. This was carried by the members rising in silence.

THE LATE DR. MURRAY LINDSAY.

Another very old member of the profession who had gone was Dr. Murray Lindsay, who had also been President of the Association. No doubt many of those present would remember the successful meeting at Buxton in 1893, which was held in the year of Dr. Lindsay's presidency. Dr. Lindsay took a very keen interest in the pension question, and although ill-health did not allow him to be present at many of the recent meetings of the Association, he felt sure that the news of his decease would be received with regret by all the members of the Association. The President moved that a similar vote of condolence be sent to his relatives. This also was carried by the members rising in silence.

THE CARE AND CONTROL OF THE FEEBLE-MINDED.

The PRESIDENT mentioned that a letter had been received from the National Association for the Care and Control of the Feeble-minded relative to proposed legislation for that class of defectives, and stated that a resolution had been passed by the Council on this subject as follows: "That this Association is strongly impressed with the great danger to the State which results from the absence of any power to control the feeble-minded, and heartily supports the principle of granting powers of care and control." Not having the terms of the Bill before them the Council could not criticise it, but they felt that they would like to strengthen the hands of the Associations concerned, and they had further referred the matter to the Parliamentary Committee.

THE DIPLOMAS IN PSYCHOLOGICAL MEDICINE.

The PRESIDENT stated, for the benefit of such as had not been present on the previous day, that a Special Meeting had been held in that room, at which the subject of the newly created Diplomas in Psychological Medicine in relation to existing medical officers was discussed, and also the general subject of the status of the assistant medical officers of asylums. A great many interesting speeches were heard, as well as two very valuable papers from Dr. Rows and Dr. Orr. After a prolonged discussion the opinions of the meeting were finally crystallised in two resolutions. One was proposed by Dr. Craig as follows: "That this meeting strongly urges the importance of necessary facilities being provided to assistant medical officers of asylums for obtaining the Diploma in Psychological Medicine or other special qualification. This question is referred to the Educational Committee in order to give effect to the expressions of opinion at this meeting." That came before the Committee that morning. The second resolution was proposed by Dr. Bernard Hart as follows: "That a Committee be formed to consider the status of psychiatry as a profession in Great Britain and Ireland, and the reforms necessary in the education and conditions of service of assistant medical officers." The appointment of that Committee was entrusted to the Ex-President, the President-Elect, and himself, with the addition of the General Secretary. Steps would be taken immediately in accordance with the resolution.

The following candidates for ordinary membership were ballotted for and unanimously elected, Dr. Collins and Dr. Hunter acting as scrutineers.

Ellerton, John Frederick Heise, M.D.Bruz., M.R.C.S.Eng., L.R.C.P.Edin., 8, Leam Terrace, Leamington Spa. (Proposed by W. Douglas, R. Percy Smith, and Alfred Miller.)

Gavin, Lawrence, M.B., Ch.B.Edin. L.R.C.P. & S. Edin., L.R.F.P.S.Glas., Assistant Medical Officer, London County Asylum, Horton, Epsom. (Proposed by John R. Lord, David Ogilvy, and Samuel Elgee.)

Hughes, Frank Percival, M.B., B.S.Lond., M.R.C.S., L.R.C.P., The Grove, Pinner, Middlesex. (Proposed by W. H. B. Stoddart, R. P. Smith, and Maurice Craig.)

MacCarthy, Hilgrove Leslie, M.A., M.D.Dubl., D.P.H.Oxon., Park Hospital (M.A.B.), Lewisham, S.E. (Proposed by J. G. Porter Phillips, G. F. Barham, and C. Hubert Bond.)

Robson, Lieut. Hubert Alan Hirst, I.M.S., M.R.C.S., L.R.C.P.Lond., care of Messrs. Grindlay Groom, Bombay. (Proposed by R. Percy Smith, G. F. Barham, and C. Hubert Bond.)

Sargeant, John Noel, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Medical Superintendent, Newlands House, Tooting Bec Road, S.W. (Proposed by R. Percy Smith, Frank R. King, and James Chambers.)

A very interesting and valuable paper was read by Dr. GEOFFREY CLARKE on "Sterilisation from a Eugenic Standpoint." The paper was largely based upon a laborious analysis of the clinical records at Long-Grove Asylum. It was followed by a discussion in which Drs. STANSFIELD, EDEN PAUL, WOLSELEY-LEWIS, BOYCOTT, M. A. COLLINS, BOND, D. G. THOMSON, SOUTAR, HAYES NEWINGTON, G. M. ROBERTSON, and the PRESIDENT took part, and to which Dr. CLARKE replied.

The Association then resolved itself into a joint session with the Section of Gynaecology and Obstetrics of the Royal Society of Medicine, Dr. Dawson gracefully surrendering the Chair in favour of Dr. Amand Routh, the President of the Section. The subject for debate was "Amenorrhœal Insanity," and it was introduced in a very comprehensive paper by Dr. C. T. EWART.

The paper led to an animated and interesting discussion, in which Drs. ROBERT JONES, MACNAUGHTON JONES, PERCY SMITH, RUSSELL (Glasgow), WALTER GRIFFITH, HAYDEN BROWN, STODDART, and the PRESIDENT OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION took part.

Dr. AMAND ROUTH congratulated the joint meeting on the discussion. It was known, he said, that menstruation was due to something, some chemical agent, which accumulated in the blood, reached a certain pitch, and encouraged the uterus and the ovaries to become active. The change in the blood was due to the formation of an excess of calcium, and the first act of the menstruating uterus was to excrete a large quantity of lime salts, which lowered the lime content of the blood and encouraged hæmorrhage from the uterus. Amenorrhœa showed that the products which ought to be in the blood in order to encourage menstruation were absent. So probably amenorrhœa meant that the patient suffered from a diminution of some substances and an excess of others.

Dr. EWART replied, but did not attempt to traverse all the arguments which had been adduced, owing to the pressure of time.

The members subsequently dined together at the Café Monico.

SOUTH-EASTERN DIVISION.

THE AUTUMN MEETING of the South-Eastern Division was held, by the courtesy of Dr. Hugh Kerr, at the Bucks County Asylum, Stone, Aylesbury, on Wednesday, October 4th, 1911. Among those present were—Drs. H. M. Baker, Fletcher Beach, David Bower, T. O'C. Donelan, F. W. Edridge-Green, Francis H. Edwards, Hugh Kerr, J. Grimmond Smith, T. E. K. Stansfield, John Turner, F. Watson, and David Hunter (Hon. Secretary).

Visitors: The Rev. E. C. Stukeley and Dr. J. P. Westrup.

Letters regretting absence were received from Drs. Bond, Greenlees, Haynes,

Heasman, Robert Jones, A. L. Newington, Pasmore, Peachell, Phillips, and Shuttleworth.

From noon to 1.30 p.m. the members visited the Asylum wards. At 1.30 Dr. Kerr entertained the members to luncheon. At the termination of lunch Dr. Fletcher Beach proposed a vote of thanks to Dr. Kerr for his kindness in so hospitably receiving and entertaining the Division. Dr. Kerr suitably responded.

The Divisional Committee held a meeting at 2.15 p.m., Drs. Donelan, Stansfield, and Hunter being present.

The General Meeting was held at 2.45, Dr. Kerr in the chair.

The minutes of the last meeting, having appeared in the JOURNAL, were taken as read and confirmed.

The invitation of Dr. Francis H. Edwards to hold the Spring Meeting of the Division at Camberwell House on April 23rd, 1912, was unanimously accepted with much pleasure.

Dr. JOHN TURNER read a paper entitled "A Classification of Insanity" (see p. 9).

The following communication was received from Dr. Robert Jones, who was unable to be present :

Dr. John Turner has essayed a labour which of all others is the most liable to criticism. To suggest a classification of insanity is not to invite but to command criticism, but he is an old warrior and is well acquainted with the field of combat.

I sympathise with his desire to have an anatomical basis, but apart from a few conditions associated with mental symptoms such as general paralysis, a pathological classification is impossible, and we are compelled to fall back on one based upon symptoms, and it is probable from the treatment point of view that when the nurse or doctor is called in, either would be glad to know whether the patient needed calmatives and sedatives or some other or opposite treatment. It is *symptoms* after all which decide whether the patient is to be tried at home or whether he or she should be at once removed into a special home, hospital, or asylum.

A classification based upon the evolution of the personality, *i.e.*, upon the psychological changes occurring during the life of the individual, would be a most desirable one, for in the "normal" psychology of our text-books we have the physiology of the mind and a key to it in disease, but at all stages of evolution there are abnormalities and morbid changes occurring which defy the construction of any scheme based only on psychological analysis. Changes in the feelings, emotions, the intellect or the will imply such a commingling of psychic processes as would make a psychological classification impossible.

Dr. Turner suggests one based on prognosis, but surely the division of diseases into curable or incurable is not only unscientific but impossible, as some of the incurables recover and the curable remain uncured.

The suggestion of the late Dr. Andriezen to classify the insanities upon a biological basis should certainly find some favour, but even his division of paraphrenia and phrenopathy is an overlapping and is not a mutually exclusive scheme.

Dr. Turner's paper suggests a feeling of discontent with, or, may I suggest, perhaps of insufficiency in regard to our present tabulated scheme, and the fact that this is now some five or six years old implies it is an infant that appears to be outgrowing its clothes.

I have no quarrel with dementia præcox except that personally I think we have a better term in "primary dementia," and, as he says, the dementia is not limited to the period of youth, nor do I regard the division hebephrenia as implying a well-defined type unless it is applied to the mental changes in the very young which may come under that term. From the point of nomenclature I dislike manic-depressive because in all or almost every case of so-called manic-depressive insanity there is a normal stage, and alternating insanity is a more descriptive title.

I certainly would like to add to the scheme of the Medico-Psychological Association Committee a group to include the many hysterical, impulsive, and irrational symptoms that one sees in large asylums with a population recruited from urban areas. They are not maniacal, nor are they melancholic, and the

alternating phases of suggestibility and impulse characteristic of what is described as dementia præcox do not cover the symptoms. I think we can accept the explanations of Freud, Janet, and others as to the origin of these symptoms, but I think the hysterical group would be a valuable addition in any new scheme. There is no doubt that with the changes occurring in our civilisation there are mentally adaptive conditions to meet them, and we see among our incipient cases many examples of a failure in the mental states associated with hysteria, neurasthenia, and compulsion neuroses which cannot at present be definitely covered by the scheme we all now make use of, and Dr. Turner's suggestion here is a good one.

Dr. Turner appears to include idiocy or certain forms of it as traumatic and accidental and he refers to the form amaurotic idiocy. In some of the sections and plates I have seen there appeared to be a remarkable gliosis involving every part of the brain. It is difficult to see how this can be accidental or traumatic in origin unless on the ground suggested, that a lesion in infancy tends to spread and become general whereas a like lesion in adults becomes circumscribed and encapsuled. Also, it seems to me—but I am not a pathologist—impossible to distinguish mesoglia from neuroglia except only in the possible size of the cells.

The division of delusional cases in Dr. Turner's practice is interesting. Hitherto those not relating to the senses have been considered more in regard to their content, such as persecutory, grandiose, etc., rather than in their tendency, and I am not satisfied that "puerility and perverseness" quite denote or connote their significance.

I certainly object to "lucid insanity." Lucidity inclines and prejudices one to look for sanity rather than insanity, and such a terminology in my opinion confuses any proffered explanation, and would certainly lead to adverse criticism from a jury in a medico-legal case. I quite appreciate what Dr. Turner means to imply, and I should prefer "logical insanity" to "lucid insanity," for logic has nothing to do with the content of the premise—only with the truth of the conclusion.

In his classification of mania-melancholia there is overlapping. In the one case these are considered from the psychological standpoint under "emotional" and from the developmental under "involutional." If these, then, why not vascular, diathetic, etc. The suggestion that confusional insanity should be classed as "exhaustion" and alcohol, is a further example of an overlapping proposal, being a form of insanity as well as a classification from the point of view of causes. A desideratum in any scheme is the possibility of placing any case at any moment of examination into a definite category, and this is not possible in Dr. Turner's scheme as the form may be mania, and the only place where alcohol figures is under "confusional" insanity.

I also object to the term "idiopathic," and especially where, as in the case of alcoholic confusional insanity, a definite cause is suggested, and, I think, although Dr. Turner has presented a very valuable contribution, and one with many suggestions, that the ideal classification is yet to come.

I am sorry at the last moment to be unable to attend, and it is only at Dr. Turner's suggestion (for he very kindly permitted me to read his paper) that I venture to criticise it *in absentia*, as it is not unlikely that hearing his own explanation might modify what I write.

DRS. KERR, FLETCHER BEACH, and EDRIDGE-GREEN also discussed the paper.

The CHAIRMAN regretted that, owing to the lateness of the hour, there would not be time to hear Dr. Corson's paper on "Insane Heredity in the Insane of a Rural Population," and this was taken as read.

After the meeting Dr. Kerr kindly entertained the members and visitors to tea.

SOUTH-WESTERN DIVISION.

THE AUTUMN MEETING of this Division was held at the Bristol City Asylum at Fishponds, Bristol, on Friday, October 27th, 1911.

The following members were present: Drs. Aveline, Bazalgette, Lavers,

McBryan, Marnan, McDonald, Nelis, Phillips, Rains, Rutherford, J. M. Soutar, Scott Williamson, and White, and the Hon. Divisional Secretary (Dr. Blachford).

Dr. McDonald having been appointed to the Chair the minutes of the last meeting were read and signed.

The date of the Spring Meeting was altered from Friday, April 26th, 1912, to Thursday, April 18th, 1912, a Thursday being more convenient as regards train service.

The invitation of Mrs. Fox to hold the Spring Meeting at Brislington House, near Bristol, was unanimously accepted.

Drs. SCOTT WILLIAMSON and PHILLIPS read a paper on "Further Investigation on the Cerebro-Spinal Fluid in Insanities" (see p. 84). This gave rise to an interesting discussion, both on the paper and the cases shown, which was taken part in by Drs. McDONALD, SOUTAR, NELIS, and BLACHFORD. Dr. BLACHFORD suggested during discussion that as all asylums had not opportunities for pathological work, and as the lead had been given by London, Scotch, and some northern asylums, it was time something was done in the south-west, and he proposed—"That a committee of five be appointed to consider the question of a central pathologist: each asylum to contribute towards the cost of the work." This was seconded by Dr. AVELINE, and Drs. McBryan, Soutar, Aveline, Blachford, and Scott Williamson were elected to form the committee and asked to report at the Spring Meeting.

NORTHERN AND MIDLAND DIVISION.

THE AUTUMN MEETING of this Division was held at the kind invitation of Dr. E. H. O. Sankey at Boreatton Park, Baschurch, Salop, on Thursday, October 19th, 1911.

Dr. Dawson, the President of the Association, presided, and the following members were present: Drs. L. F. Cox, C. K. Hitchcock, J. Middlemass, B. Pierce, D. F. Rambaut, E. H. O. Sankey, E. W. White, T. S. Adair; and one visitor: Dr. W. H. Packer.

The minutes of the last meeting were read and confirmed.

Drs. Hitchcock, McDowall and Pierce were unanimously re-elected to form the Divisional Committee for the next twelve months. Proposed by Dr. White, and seconded by Dr. Middlemass.

SOME REMARKS ON THE DIPLOMA IN PSYCHOLOGICAL MEDICINE.

By BEDFORD PIERCE, M.D., F.R.C.P.,
Medical Superintendent, The Retreat, York.

Four Universities have already instituted diplomas in Psychological Medicine, viz., Edinburgh, Durham, Manchester and Leeds. Two others are seriously considering the subject, and the College of Physicians in London has decided that Members of the College can enter for a special examination in psychiatry.

It is clear that the policy of the Association as expressed in the circular letter to the teaching bodies in July, 1910, has been generally approved.

Before considering the effect of the diploma upon those engaged in asylum work, it will be well to state briefly the conditions under which the diploma can be obtained. Although, as a general rule, the suggestions of the Association have been acted upon, there are important differences in the requirements of the various universities.

Edinburgh and Durham both require one academical year's study. The subjects fall into five groups: (1) Anatomy, physiology, and pathology of the nervous system; (2) psychology and experimental psychology; (3) bacteriology in relation to mental diseases; (4) clinical neurology; (5) psychiatry.

Two examinations are held at the end of the winter and summer sessions respectively.

Edinburgh permits candidates who have held responsible asylum posts for not less than two years, exemption from one or more subjects of the curriculum during the next three years dating from October, 1911.

Durham permits candidates qualified as medical practitioners before January 1st, 1911, to enter for the examination without attendance on the courses of instruction.

Although these exemptions are of great value to men already engaged in asylum work, it is evident that special courses of instruction must be taken if the examinations are to be successfully passed unless the candidate has already had special advantages for study. It would seem to me that as a minimum six months' whole time study will be needed to give a chance of success.

In Manchester the courses of study are much the same, and the examination is also divided into two parts.

Attendance at the University for at least two terms is required. Candidates must have been medical officers in a recognised asylum for a year or have received six months' clinical instruction in psychiatry.

In Leeds there are also two examinations. Six months' work at one of the recognised laboratories of the University is required. During the same six months it appears possible to act as clinical clerk and obtain instruction in clinical psychiatry.

The Royal College of Physicians in London decided not to grant a special diploma, but instituted a special examination in psychological medicine for members of the College. The subjects are:

- (1) Psychology and the study of conduct in relation to mental disorder.
- (2) Psychological medicine and the jurisprudence of insanity.

It will be noted that no mention is made of neurology or special study of the brain and nervous system. These subjects are required in the examination for the membership.

Much can be said in favour of this view, and that a man must be a well qualified physician before he begins to specialise. It seems likely that many candidates will in the future take the membership and obtain the certificate of distinction in psychological medicine, which will no doubt be looked upon as equivalent to the diplomas of other universities.

London University, National University of Ireland, and several other universities permit Bachelors of Medicine to take their M.D. degree in psychological medicine, which also will no doubt be considered an efficient qualification.

It is to be expected that after a time, when the importance of the matter is generally recognised, that some central authority, such as the General Medical Council, will state in formal terms what curriculum and examinations will be necessary in order to obtain a special qualification in psychological medicine.

I think we may safely conclude that the new diploma has come to stay, and that before long, it or a similar qualification will be obtained by all who wish for advancement in this branch of medical practice. It is probable that in time this diploma will take a position corresponding to the D.P.H., and that all medical men will be required to take it before appointment to senior posts.

It is true that this is a long way off at present, but it seems to me that the above anticipations are inherently reasonable and consequently we may expect the new diploma will gradually increase in importance until it is recognised by the State. However this may be, it behoves us to consider carefully how this new departure affects those who are now engaged in the care and treatment of the insane. So far as I can form an opinion the diploma will have a distinctly beneficial influence and should be supported in every possible way.

I do not suppose that any of us will expect great things from a few months' special study followed by an examination more or less difficult; we all know that this alone will not qualify for medical work, and we admit that examinations are a poor test of fitness in any department of life. On the other hand, at no time in the history of medicine has it been more important that special technical studies should be followed up after graduation. It is absolutely impossible in the few years given to medical education for anyone to become proficient in the special subjects required in asylum practice. The future is full of hope, if there are within our ranks those able to apply the recent advances in medical knowledge to our special department of medicine. Without post-graduate study this is impossible. The technical knowledge required for vaccine therapy, for examination of the blood or cerebro-spinal fluid, and especially for psycho-analysis (to mention only three modern developments) is considerable.

This kind of work is practically out of the reach of most medical officers, situated as they usually are in remote country districts. No doubt there are men who will surmount every obstacle. Did not Darwin study the movements of climbing plants when suffering acute physical pain? But most of us cannot work without encouragement, and I am convinced that the special courses of study in some university centre will not only widen the outlook of the young practitioner, but will also awaken enthusiasms, which under present conditions are only too frequently smothered as soon as they are born. I think, therefore, we ought to support the diploma as tending to awaken and develop the scientific spirit.

It follows as a matter of course that if this be so, coming generations of asylum officers will be better equipped for their work, greatly to the benefit of those under their care.

The new departure will also tend to improve the status of those engaged in asylum work. This may be considered a side issue, and if we allow it to influence us unduly we may be accused of following trades union methods. This accusation would, indeed, be justified if we looked at the question from a selfish point of view; but our aim is to become better qualified and more efficient, and we only expect an improved professional status when the character of the services rendered to the community justifies it.

If asylum officers are content to be merely administrators and if scientific attainments are not valued, the outlook is gloomy in the extreme. The State cannot be expected to employ highly trained men at adequate salaries if others not so trained will do equally well. We can only justify our position in asylum administration by being able to bring to our work special knowledge and trained intelligence which laymen do not possess. It is because the new diploma will assist in this connection that I look upon it as calculated to improve the status of asylum officers.

Broadly speaking, at the present time the position of assistant medical officers in asylums is highly unsatisfactory.

That so many of them are obliged to live celibate lives is not only contrary to nature but short-sighted in the public interest. There seems to me no adequate reason why in our large asylums houses for married medical officers should not be provided on the edge of the asylum estate as obtains so generally in Germany. The extra cost to the ratepayers would be more than counter-balanced by improved efficiency. Discontented and discouraged servants are rarely good ones.

Assistant medical officers, moreover, have little or no legal status. They have no authority, as this is vested entirely in the medical superintendent. It seems preposterous that an A.M.O. of ten years' service should be unable to sign a continuation order or special certificate for a patient already under care, when a new qualified man fresh from the schools can certify a person not under care as insane. Their legal position appears to me derogatory to them as members of a learned profession.

It is, therefore, not surprising that many energetic and promising men give up asylum work. We must, moreover, admit that in some quarters scientific studies are thought little of, in a few places they are ignored if not actually disowned, whilst now and then appointments are made without any regard to medical attainments.

It is because I consider the D.P.M. will to some extent assist in remedying these evils that I think it should be welcomed heartily by those interested in the welfare of the insane.

Having set forth my views upon the general question, let me make it clear that I do not wish for any sudden change or think the time has come for us to press upon the Government the need for legislation in order to make the diploma necessary to all practising our branch of medicine. It is of the utmost importance to move slowly, and measures pushed on in advance of public opinion have little prospect of success.

On the contrary, I think the diploma should remain for some time an entirely voluntary qualification, but that the Association should, on the one hand, use its influence in encouraging its members to obtain it, and on the other, it should point out its importance to county councils and others engaged in lunacy administration. In doing this, care must be taken not to prejudice the position of existing medical officers of standing, who can hardly be expected to take up a course of

university study even if it were possible for them to leave their work to do so. The subject bristles with difficulties. I would therefore suggest that a special meeting of the Association should be called to consider the whole question.

The time and place of such a meeting should be such as would enable assistant medical officers from all parts of the country to attend, as this question concerns them much more than the senior members of the Association.

At the present juncture I think the Association might wisely be asked to take the following steps:

(1) Issue a memorandum to asylum committees and other authorities urging upon them the importance of providing facilities for further study for assistant medical officers. The necessity for at least six months' study leave at a university centre should be emphasised, so that the new diploma or its equivalent might be obtained.

(2) To appoint a sub-committee to consider the various problems which will arise in connection with the diploma in psychological medicine, with a view to safeguarding the interests of existing medical officers in asylums, in such a manner as not in any way to damage its authority and influence.

An interesting discussion followed in which the PRESIDENT, Dr. SANKEY, Dr. WHITE and others took part. The general feeling was one of agreement with the points brought forward in the paper.

The following resolution was then proposed by Dr. Pierce, seconded by Dr. Middlemass, and unanimously carried for submission to the Council of the Medico-Psychological Association:

"This meeting recommends that a special meeting of the Association be convened to consider:

"First, the diplomas in psychological medicine and other special qualifications in psychiatry in their relation to existing medical officers of institutions for the insane.

"Secondly, the social and professional status of assistant medical officers. Under the first of these heads it is suggested that the following should receive special consideration. The desirability of issuing a memorandum to asylum committees and other authorities concerned, urging upon them the importance of providing assistant medical officers with facilities for further study at university centres. The minimum period of study-leave should be not less than six months."

Dr. SANKEY then read a short paper introducing the subject of the "Treatment of Acute and Early Cases of Insanity, with Special Reference to the Number of Patients in Asylums."

He was forcibly struck with the fact that the recovery-rate was, and is, nearly stationary. He considered that asylums were too big, and that in future buildings should be erected in the form of hospitals or receiving houses for acute or curable cases; that all cases should be first admitted to these, and that the failures and incurable cases only should be transferred thence to the asylum. He thought that the smaller number of patients under care, with a large medical and nursing staff would result in more recoveries.

Dr. WHITE, Dr. COX, Dr. MIDDLEMASS and others spoke on the subject, and reference was made to the fact that some large county asylums had acute hospitals attached to them.

The meeting then came to a close.

IRISH DIVISION.

A MEETING of the Irish Division was held on November 2nd, 1911, at the Royal College of Physicians, Kildare Street, Dublin, Dr. W. R. Dawson, President, in the Chair.

There were also present Drs. Rainsford, Donelan, O'Mara, O'Neill, Nolan, Greene, Drapes, Fleury, and Leeper, Hon. Secretary.

A letter of apology for non-attendance was read from Dr. Oakshott, of Waterford.

The minutes of the previous meeting and of the Special Meeting of the Division summoned to consider the Asylum Officers' (Employment, Pensions, and

Superannuation) Bill were read and confirmed, and correspondence in connection with the work of the Division was read.

It was arranged to hold the Spring Meeting of the Division at the Stewart Institution by the kind invitation of Dr. Rainsford.

On a ballot being taken the following gentlemen were unanimously elected ordinary members of the Association :

Gerald O'Reilly Sheridan, M.B., B.Ch., B.A.O. National University of Ireland, Assistant Medical Officer, Portrane Asylum. Proposed by Drs. Cullinan, J. O'C. Donelan, R. R. Leeper.

Henry Porter D'Arcy Benson, M.D., C.M., M.R.C.P., F.R.C.S.Edin., Medical Superintendent, Farnham House, Finglas. Proposed by Drs. W. R. Dawson, J. O'C. Donelan, R. R. Leeper.

Edgar Curnow Plummer, M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Farnham House, and Maryville, Finglas. Proposed by Drs. W. R. Dawson, J. O'C. Donelan, and R. R. Leeper.

Dr. Nolan introduced a discussion upon the Asylum Officers' Employment, Superannuation, and Pensions Bill now before Parliament, and read a telegram from Lord Wolmer. As to the present position of the Bill before the House of Commons, various clauses of the Bill and its especial bearing upon Irish asylums were discussed by Drs. O'Neill, Greene, and Drapes. It was proposed by Dr. Greene, and seconded by Dr. O'Mara, and passed unanimously, that the following resolution be forwarded at once to the inspectors of Irish asylums :

"That the Inspectors of Lunatics, Dublin Castle, be requested to represent to the Irish Government the necessity of introducing into the Asylums Officers' Employment, Pensions, and Superannuation Bill at present before Parliament a clause such as is in the principal Act in reference to the procedure as regards Irish asylums, and especially to the sanction required for pensions and gratuities to be granted under this Bill. We also consider it desirable that such other modifications be made as are necessary to render the Bill applicable to Irish procedure."

In the unavoidable absence of Dr. Dwyer his communication was read by the Divisional Secretary.

A CASE OF RECURRENT MELANCHOLIA WITH STUPOR.

By P. J. DWYER, M.B.,
Assistant Medical Officer, Richmond Asylum, Dublin.

J. D—, æt. 19 years and 3 months, messenger by occupation, was admitted to the Richmond Asylum on February 27th, 1904.

According to previous history he was always of a nervous temperament and had been delicate in infancy. He was noticed to have peculiar habits and was a prey to melancholia, constantly requiring excitement to enliven him. Six weeks previous to admission he had an attack of influenza after which he became very depressed and threatened suicide.

When admitted he was very depressed and complained of persecution from his relatives; he admitted hearing voices. In appearance he was very miserable and he gave the general impression of being a youth of rather deficient intelligence.

He continued in the above condition for about four months, during which time he complained of being annoyed by people talking about him. He also had delusions of self-accusation, and admitted masturbation for about five years.

Gradually he brightened up, but was not quite recognisant of his mental state.

He was discharged recovered on August 24th, 1904.

Patient, having threatened to commit suicide, was re-admitted on August 25th, 1906.

On admission he was very depressed and emotional. He said that he had not done any work since his discharge, because he would get tired. He believed that people used to look at him and that they knew he was addicted to self-abuse. Hallucinations of hearing were present.

After admission he developed delusions regarding his people at home, and did not wish to be sent out as he would have to go to them,

He continued depressed as a rule, with very short intervals of brightness, for about twelve months after his admission, when he began to refuse all food and would not speak; he lay motionless in bed, with his eyes closed. He was artificially fed, a process to which he submitted in a passive fashion.

He retained his healthy colour for a long period, and was quite clean in habits, performing the natural functions in a semi-automatic fashion. There was no rigidity of any joints and there was no tendency towards catatonia. His pulse was slightly quickened and the tension did not seem to be increased. Breathing was somewhat shallow, and there were no gastro-intestinal symptoms which called for treatment beyond occasional constipation.

He remained in this condition for about seven months, when he suddenly opened his eyes one morning and asked for a cigarette, which he smoked complacently; he, however, would not take any food until a few days afterwards when he began to eat in a normal fashion.

He began to improve after this and was no longer miserable, in fact he was quite the opposite, being buoyant in spirits. He told me that he remembered everything that had taken place and remembered being artificially fed, he also said that he would not open his eyes because it "came natural" to me. He volunteered the information that he had been on a long journey over the world and that he had gone where he was sent. Who sent him he could not answer. He spoke in a somewhat childish fashion, and did not seem to recognise or to be concerned by the fact that he had been inert for so prolonged a period.

Shortly after this he became restless and had to be kept in a refractory division. He refused to wear any head-covering, and was of dirty and untidy habits.

During this period his sister died in the asylum of exhaustion following acute mania within a month; this fact did not seem to affect patient very markedly when he learnt it afterwards, although he was supposed to be very attached to his sister.

On June 1st, 1908, he was discharged recovered.

June 15th, 1910, patient again returned, having threatened to commit suicide. He was acutely depressed and had delusions of degradation on admission, he was also apathetic and lethargic.

It appears that he had been working up to some months previous to admission in a printing house, but had to cease because he was annoyed by the machinery and traffic.

After admission he got a little brighter and did some work for a few days. He then complained of a pain in his head and got extremely depressed.

He refused food and exhibited the same symptoms as before for some days.

At present he is not in bed, but sits in the one fixed position unless he is told to move, which he does in an apathetic fashion. He refuses all food with a wistful smile and talks in a depressed under-tone. He is clean in habits.

His pulse is 79 and not of a characteristically high tension. There are no areas of anaesthesia.

As will be noticed from the above history, the attacks of melancholia have recurred at intervals of two years and have been accompanied by stupor on the last two occasions only. All three attacks were marked by the presence of delusions.

Regarding the stupor, it followed the description given by Craig, excepting the fact that the patient was not resistive. Neither was there any paralysis or rigidity of the large proximal joints as described by Stoddart.

There are neither verbigeration, stereotyped movements, nor rigidity, so the case could not be confused with the catatonic form of dementia præcox. In conclusion one may say, I think with a degree of certainty, that this case will terminate in dementia, as signs of enfeeblement of mind have already appeared.

The paper was fully discussed by the members present.

Dr. DRAPES said the paper was most interesting and noticed the fact that resistiveness and rigidity were absent in Dr. Dwyer's case. He considered that it was impossible to draw a hard and fast distinction between these cases of stupor, as all cases varied. Stupor, he considered, was a most interesting condition, and did not receive as much space in the text-books as it deserved, especially as regards its pathology. Dr. Drapes referred to two cases of stupor recorded by Dr. Wigglesworth in which an inflammatory change was observed in the cells of

the motor area. He believed stupor to be due to cerebral exhaustion, and it might follow upon either a maniacal or melancholic attack.

Dr. NOLAN differed in his opinion as regards the necessity for definite classification from the previous speaker, and thought that the grouping of symptoms together was desirable as in cases of ordinary physical diseases dealt with in a text-book of general medicine.

Dr. J. O'C. DONELAN drew attention to the extraordinary receptive power of the patient in Dr. Dwyer's case, and told the story that on one occasion whilst the patient was being fed another patient rushed at him and spilled the food upon his face. Months afterwards when the patient had recovered from the stupor he gave a detailed account of this incident. He considered that in stupor, only the executive mechanism of the individual sufferer was defective.

The PRESIDENT wished to remark that katatonia was not always a definite symptom in these cases, and that the memory and affective faculties were in this case in abeyance.

Dr. LEEPER regretted the want of definite pathology of this condition of stupor. He had read that an increase in the specific gravity of the blood was found in stuporose cases. He gave it as his experience that cases of stupor were generally suffering from some terrifying delusion which seemed to paralyse their intellectuality.

Dr. LEEPER read a short note on a case of surgical interest.

The patient was an elderly gentleman who stated that he had swallowed a denture consisting of false teeth set in a gold plate.

No physical symptoms were observed.

The patient was given cotton-wool sandwiches of which he had a fair quantity.

On an X-ray examination no foreign body could be detected. Fourteen days afterwards (after an ordinary enema) the entire plate was passed *per rectum*. Dr. Leeper wished to elicit the opinion of the experienced alienists present as to the proper course to be adopted in these cases, and if possible to form a definite opinion as regards the treatment of patients who had swallowed foreign bodies. A most interesting discussion followed in which Drs. NOLAN, O'NEILL, DONELAN, and DRAPES took part.

One case was recorded by Dr. Nolan of a patient who had swallowed an iron spoon which became encysted and gave little or no trouble to the patient, but death was subsequently caused by an intestinal perforation caused by a bristle from a brush which the patient had subsequently swallowed.

It was generally held that false teeth should be removed from epileptic patients, but that in ordinary cases free from marked suicidal tendency the use of dentures should be permitted so as to ensure efficient mastication. It seemed that if a foreign body had passed out of the stomach it was better to leave it alone rather than to risk a laparotomy in an insane patient.

On the motion of Dr. O'Neill, seconded by Dr. O'Mara, a vote of thanks was passed to the President and Fellows of the Royal College of Physicians for the use of the College room for the meeting of the Division and the proceedings terminated.

AUSTRALASIAN MEDICAL CONGRESS.

SYDNEY, N.S.W., SEPTEMBER 18TH TO 23RD, 1911.

SUMMARY OF PROCEEDINGS OF THE SECTION OF PSYCHOLOGICAL MEDICINE AND NEUROLOGY.

The President of the Section, Dr. BEATTIE SMITH, of Melbourne, Victoria, delivered his presidential address on the morning of Tuesday, the 19th (see p. 1).

A discussion on "Treatment of Mental Patients in General and Special Hospitals without Certification" was then opened by Dr. ERNEST JONES, Inspector-General for the Insane, Victoria. After referring to the historical side of the question, Dr. Jones stated that some seven or eight years ago the Lunacy Depart-

ment approached the general hospitals in Melbourne as to a ward or beds being set aside for early treatment of mental diseases, but with no satisfaction. Victoria then adopted what since Dr. Manning's time had been in use in New South Wales—the Reception House. Victoria is now trying to get legislative power passed to enable voluntary patients to be admitted into a mental hospital, which has been built and equipped but is handicapped by this legal difficulty. Dr. Jones also suggested that early cases likely to recover should be notified to the Lunacy Department, and assistance in way of mental nurse or attendant asked for, so that patient may be attended to at home.

Dr. MONTGOMERY, the Inspector-General for Hospitals of the Insane, Western Australia, gave information as to means taken at Perth, Western Australia, for care of suspected insane, and strongly advocated treatment in general hospitals. In 1908 two wards were built at the Perth Public Hospital for this purpose. The patients are under the care of the Visiting Medical Staff; men are nursed by attendants sent by the Lunacy Department, women by nurses provided by the hospital. The Inspector-General for the Insane has the right to visit wards, inspect books, etc. Since the opening of these wards 218 men and 43 women were admitted, and of these 103 men and 6 women were discharged recovered. The result has been so very satisfactory that a similar ward is being erected at Kalgoorlie Hospital, and plans are being prepared for wards at Northam and Albury. Dr. Montgomery is of opinion that treatment of suspected cases in general hospitals spares many patients the stigma of insanity, and is the means by which medical men and nurses come in touch with such patients, and thus receive a training they would never otherwise do.

Dr. DOWNEY, Medical Officer at the Hospital for the Insane, Adelaide, South Australia, read a paper discussing the modes of treatment in different states of Australia, and then referred to work about to be done in Adelaide. It is proposed to open a mental ward at the Adelaide Public Hospital, patients to be attended by the honorary medical officers of the hospital, as well as by one of the medical officers of the Lunacy Service. Patients are to be admitted in same way as to other wards of hospital, *i.e.*, by a legally qualified medical man giving a certificate recommending treatment. Dr. Downey advocated strongly the many advantages to be gained by treating patients thus. He also pointed out the necessity for every hospital for the insane being provided with a special building for the treatment of new admissions, this building to be separate from the main building, so that recent and curable patients would be treated quite apart from the chronic and incurable, a system which is now generally adopted in New South Wales.

Dr. MONTGOMERY MOSHER, of Albany, New York, U.S.A., kindly sent a paper describing the annex at the Albany Hospital, Pavilion F, Department of Mental Diseases, which has been in use since 1902. Incipient mental patients are admitted without legal process for observation and treatment and determination of the advisability of commitment to institutions for the insane. During nine years 2,000 patients have been admitted, of whom 1,000 were returned to their homes and occupations. He is of opinion that in treatment of mental disorders in the incipient stage readily available provision is required, and this is to be found in every city hospital which should properly acquiesce to this broader conception of duty.

Dr. ERIC SINCLAIR, Inspector-General for the Insane, New South Wales, read a summary of eighty-three replies from general practitioners to a letter sent to some five hundred, asking their opinion as to the treatment of early cases of mental disorder. The impression drawn from these replies was that the great majority of medical men in general practice, no matter at what stage the disease exists, recognise all mental conditions in the same light, and therefore recommend the same treatment for the incipient as for the well established. They object strongly to patients of this character being admitted to local general hospitals. If hospitals are to be provided they must be of a special type or reception house, with trained mental nurses, and all at Government expense.

Dr. SINCLAIR then spoke from his own experience, and of the work at the reception houses (Sydney and Newcastle) in New South Wales. During 1910, 1,289 cases were treated, of whom 55.8 *per cent.* were certified and sent to hospitals for the insane, while 44.2 *per cent.* were discharged. These are the only two reception houses in New South Wales, but in July, 1904, rooms in the gaols

of twelve of the larger country towns were gazetted as reception houses. The patients admitted are under the care of a visiting medical officer, the nursing staff being provided at the expense of the Lunacy Department. This, though it may meet a difficulty, is not so satisfactory from the patient's point of view as the reception house proper is. However, during 1910, 308 were thus treated, 30.5 *per cent.* being sent to hospitals for the insane, the rest being discharged. If population in country towns was larger, provision might be made by the Department as in Sydney and Newcastle, but at present too large a cost would be incurred. "The present indication is to make use of the local general hospitals in the country towns with or without additions specially provided for mental patients, and for the Lunacy Department to undertake cost of maintenance of mental patients in these hospitals, and to provide specially trained nurses or subsidise suitable local nurses." Dr. Sinclair also referred to "an experimental contribution to the treatment of patients before certification"—the ward for twenty patients (male) in the grounds of the Reception House, Sydney. Patients are admitted in the fullest sense voluntarily, and the management is as far as possible on the lines of a general hospital.

Dr. A. W. CAMPBELL, of Sydney, stated that the essential object of obtaining treatment for cases of early mental disorder in general hospitals is to relieve and save them from the stigma of incarceration in a hospital for the insane, and any step which can be taken so to improve conditions meets with his concurrence. He thought that the doctors in their replies to the questions sent them, in the majority of instances, based their remarks on developed instead of an early mental disorder, and obviously the general hospital is not the place for treating developed insanity. He agreed in thinking that the reason the mental hospital at Darlinghurst is not taken advantage of to the extent it should be is that it is so close to the gaol. He was of opinion that, in the case of a city such as Sydney, if treatment of early cases in general hospitals were permitted, there should be a single central examiner, and he deplored police intervention in non-criminal cases of insanity.

Dr. MILES (Sydney), The Hon. Dr. BUTLER (Hobart), Dr. McDOUALL (Sydney), the PRESIDENT OF SECTION, and others took part in the discussion.

This discussion was followed by a paper on "Internal Secretion and the Nervous System," by Dr. G. E. RENNIE (Sydney), and by one on "The Use of Thyroid Extract in Treatment of Mental Diseases," by Drs. DAVIDSON and JOHNSTON (Sydney), in which they recommended the administration of thyroid in doses increasing by 5 gr. every second or third day from 15 to 80 gr., followed by sudden cessation when pulse had run up to about 160, and heart's action was becoming distressing. Some 153 cases were reported on 76 men, 77 women, 20 men and 39 women recovering from their mental trouble. The forms of mental disorder found to be most suitable for this treatment were melancholia with stupor, and adolescent insanity. Tables were used to demonstrate the metabolic changes which occur before, during, and after the administration of the drug.

Dr. McDOUALL (Sydney) presented a paper on "The Training of Mental Nurses." He stated that in 1887 the systematic training of mental nurses began in New South Wales, and at first was a two years' course, but in 1905 was changed to a three years'. Dr. McDouall is of opinion that the status of the mental nurse should be improved, and suggests a general Government hospital should be established in Sydney, where special medical and surgical and midwifery cases would be sent from the different mental hospitals, and that the nurses who have done well in the mental certificate examination should form the staff of this hospital, and after being there for two years should pass an examination in general work, which would give them a certificate as general nurses. Dr. McDouall is also of opinion that a uniform training and examination should exist throughout Australia, and that a branch of the Medico-Psychological Association of Great Britain and Ireland should be formed.

Tuesday afternoon (19th) was devoted to Neurasthenia, Hysteria, and Psycho-analysis. The Congress was highly honoured by distinguished scientists contributing papers to this Section, those bearing on "The Freud School" opening up new ground, Sir T. CLIFFORD ALLBUTT writing on "Neurasthenia," Dr. C. G. JUNG (Zurich) on "The Doctrine of the Complexes," Dr. Sigm. FREUD (Vienna) on "Psycho-analysis," and Dr. HAVELOCK ELLIS (England) on "The Doctrine of the Freud School."

On Wednesday all Sections of Congress met together, and a discussion on "Serum and Vaccine Therapy" took place.

On Thursday morning the Section of Neurology joined the Children, Pathology and Public Health Sections, and a discussion on "Infantile Paralysis" took place. Many interesting and valuable papers were read, and it was unanimously resolved that the State Governments should be approached with regard to the compulsory notification of infantile paralysis.

On Thursday afternoon Dr. A. W. CAMPBELL (Sydney) read a paper on "The Localisation of Function in the Cerebellum," the Section of Anatomy joining with the Section of Neurology. The reader's remarks were based mainly on a comprehensive histological examination of the cerebellum in man, the ape, and many lower animals, a research similar to his previously published research on the brain. He pointed out that histology gave no support to Bolk's conclusions, founded on studies in comparative anatomy, that the cerebellum is divisible into functional areas related to different muscle provinces. In the case of the brain, functional areas can be distinguished histologically by differences of cortical structure; moreover, it can be shown that these areas stand definitely connected with known conduction tracts. In neither way is this the case with the cerebellum. In Dr. Campbell's opinion the experimental work of Rothmann and Van Rijnberk, which has been advanced as favouring Bolk's hypothesis, is negated by the elaborate researches of Sir Victor Horsley and his fellow workers, while the experiences of modern surgery and clinical medicine similarly tell against such localisation of function. Dr. Campbell promises later to write a full account of his research, which will include a histological survey of the cortex cerebelli from *aves* to *homo*, observations on variations in intrinsic nuclear representation, and a discussion on homologies and other points of interest.

Dr. GODFREY (Melbourne) then read an interesting and elaborate paper describing in detail several cases of "Korsakow's disease." Dr. Godfrey's position as Medical Superintendent of the Receiving House, Melbourne, has given him the opportunity of having under his care many cases of Korsakow's disease, and he has written this paper as the result of his personal observations.

Dr. G. E. RENNIE (Sydney) read a paper on the "Significance of the Babinski Reflex." After detailing the physiology of the plantar reflex, he gave the history of two cases which proved that the Babinski reflex may be a merely temporary condition and therefore not significant of permanent organic nerve disease.

Dr. J. T. HOLLOW (Melbourne) presented a paper on "Fatigue," and Dr. GALLANDER (Melbourne) one on "Dementia Præcox and its Prophylaxis."

On Friday morning a discussion on "Segregation of the Epileptic and the Feeble-minded" was opened by Dr. FISHBOURNE (Melbourne). The paper was read by Dr. CHISHOLM ROSS (Sydney). (It is with great regret one has to announce that this was Dr. Fishbourne's last effort to support a cause to which he has devoted many long years. He died of cerebral hæmorrhage on September 27th.) Dr. Fishbourne discussed the "Colony Care of the Epileptic." He recommended "the adoption of colonies on the cottage system for sane epileptics with educational provision for children; institutions or perhaps mixed cottage and institution form for insane epileptics. This will leave the hospitals for the insane to do their special work, will relieve them of a burden that is unfair if they are to perform their work properly, and will at the same time put an end for ever to that worst of all fates, for the sane epileptic to be driven to the shelter of an insane asylum because there is no place that will receive him." He is of opinion that for this to come into generally accepted usage, an evangelist must arise who will educate all and everyone to the crying necessity for the establishment of colony care for every dependent and helpless epileptic, and will prove to the public that the initial expenditure is wise and necessary and therefore a truly economical way of spending public money. What applies to the epileptic applies still more to the feeble-minded. Dr. Fishbourne pointed out the urgent necessity for obtaining an approximate estimate of the number of feeble-minded, and proved that this might be easily done, when as happens every three years, franchise returns are made by the police; a list should be obtained of the names of children between the ages of five and fifteen, and schools they attend, and if not, why. This list would be forwarded to the Education Department, who would find out the number who did not go to school, and take the necessary steps to meet the difficulty.

Dr. Fishbourne suggested permanent sequestration, and regretted the falling into disuse of the old spartan law of sacrificing the weak for the strong, so as to protect the integrity of the State. He joins with Miss Mary Dendy in stating that we have no right to provide for our future a feeble, helpless, half-witted population as we at present do.

Dr. E. M. STEVENS (South Australia) followed with a paper on "The Treatment of Mentally Defective Children from a National Standpoint." His information was obtained from a world tour, when he made exhaustive inquiries in most of the large centres of population as to the methods adopted by educational authorities for the medical inspection of school-children, including mentally defectives. He described the systems at London (Osborne Place School), Edinburgh, Glasgow (Bridgeton School), and Wiesbaden. Imbeciles are admitted to the schools he visited in Edinburgh and Wiesbaden, and he considered this fatal to the educational work. Dr. Stevens approves of Dr. Bishop Harman's method of estimating a defective child's standard. As far as treatment goes, Dr. Stevens is rather spartan in his ideas. A wise process of discrimination must prove of inestimable benefit to the nation by improvements in the environment of children who have been palpably neglected, and by segregation, with or without emasculation, of cretins, idiots and imbeciles, who are likely to prove a menace to the progress and prosperity of the greatest number.

Dr. HARVEY SUTTON next read a paper on "The Feeble-minded: Their Classification and Importance." As medical officer to the Education Department, Melbourne, he has had great opportunities of dealing with this question. He described the Binet method, which he has used extensively, and highly approves of as a means of classification. Dr. Sutton also gave the findings of a Commission which has recently considered the question of teaching the feeble-minded. This will involve education of certain defective children till twenty-one, and then provision for care in an industrial and farm colony basis. Figures were also given of the number of mentally defectives. In seventy-nine schools in Melbourne, the Medical Inspector found 304 definite feeble-minded; the Truant Officer found in nine out of thirteen Metropolitan areas 54 feeble-minded; and eight medical practitioners reported 13 not in the above numbers. There are, therefore, a minimum number of $304 + 54 + 13 = 371$ definite cases of feeble-mindedness. The Medical Inspector also found besides the "well marked," 321 whom he classed "probables," and 298 "very backward." So that there are in Melbourne at least $371 + 321 + 298 = 990$ who require special educational treatment and investigation. This, as Dr. Sutton says, points to the fact that feeble-mindedness is a large and important factor in school life.

Dr. ERIC SINCLAIR (Sydney) then gave a clinical demonstration of the kindergarten methods carried out at the Hospital for the Insane, Newcastle (the Section of Medicine joining the Section of Neurology while this was going on). Dr. Sinclair prefaced the demonstration with a statement of the principles adopted by the teachers. The best results, he also stated, have been obtained with young children of three to ten years of age. The children were all imbeciles, and in first place their bad habits and destructiveness had to be corrected. Speech developed or improved with the teaching, and all showed better behaviour and improved attention, and became observing and thoughtful, helpful to each other, and better able to distinguish between right and wrong. Demonstrations were then given of marching, sense games, songs, bead-threading, and gift play, building blocks, etc., imbecile children taking part and proving a credit to their teachers.

Dr. REUTER ROTH, of Sydney Education Department, gave certain facts ascertained from his work. He is of opinion that there are over 200 mentally deficient (not backward) children in the Metropolitan area of Sydney, mostly degenerates, for whom nothing at present is being done. Many are vicious, and have a bad influence on healthy children.

Dr. MARY BOOTH, of the Victorian Education Department, stated that she felt a national campaign should be established, figures collected, and other evidence brought to show that we are face to face with a grave national danger. She is also of opinion that segregation should be compulsory.

Drs. JONES (Melbourne), CROWTHER (Hobart), ADYE (Ballarat, Victoria), and others took part in the discussion, and it was agreed that "This Congress should advise each State Government to inquire as to number of feeble-minded children

needing special education, and to take steps for the provision of such education." It was also agreed to appoint a committee with a representative in each State and a central committee in Melbourne, to which each State representative should report, and which committee should be responsible for tabulating and distributing returns, so that the people of the Commonwealth may be educated on the problem of the feeble minded.

Papers were then communicated by Professor OPPENHEIM (Berlin) "About Tabes-like Syndromes in Infancy," and by Dr. ERNEST JONES (Melbourne) on "The Uniformity of Statistics in Hospitals for the Insane."

Dr. CATARINICH (Sunbury, Victoria) presented a paper on "The Value of von Pirquet's Test in Psychiatry." He stated that some 825 patients were submitted to this test, and 244 reacted positively (29.5 *per cent.*). Three classes of patients were shown by this method to be specially liable to infection by the *Bacillus tuberculosis*: (1) Melancholiacs, 41.5 *per cent.*; secondary dementers, 40.3 *per cent.* (2) Imbeciles, 35.8 *per cent.* (3) Primary dementers, 59.3 *per cent.* He is of opinion that the three types of mental disease in which phthisis is therefore common show a similarity in so far that each is of the degenerate type—with little, if any, prospect of recovery, and that generally speaking phthisis is associated with degeneracy, and may directly induce insanity, degenerate in type.

On Friday afternoon syphilis and its relation to nervous diseases was the main subject under discussion.

Dr. LATHAM (Sydney) read a paper on "A Shorter Method of Wassermann's Test, controlled by the Original," and Dr. FLASHMAN one on the "Influence of Syphilis in Production of Imbecility." He brought forward the results of Wassermann reactions on 436 patients at the Hospital for Imbeciles, Newcastle. Twenty-nine of these gave an absolutely positive reaction, and in fourteen others binding took place to such an extent that it indicated a specific affection; therefore 43, or 9.8 *per cent.*, were considered to be suffering from congenital syphilis. Dr. Flashman is of opinion that this represents the minimum, for the value of the Wassermann reaction lessens as a person suffering from congenital syphilis grows older. Individuals may be found with undoubted congenital specific lesions, and yet give a negative Wassermann.

Dr. FLASHMAN also read a paper on "The Effect of Salvarsan on Syphilitic Nervous Diseases." He cited the evidence from the literature, and gave his own experiences. He came to the conclusion that in early conditions of syphilis of the nervous system affecting either the brain, spinal cord, or cranial nerves, salvarsan must be regarded as having a rapid and satisfactory result. It has the advantage over the older methods in that it produces its effects more quickly. It seems impossible as yet to say whether the results will be more lasting. In parasyphilitic affections it can be said to have a distinctly beneficial but not lasting effect, though some cases of tabes appear to have been permanently improved, especially as regards the more distressing symptoms.

A paper was communicated by Dr. NONNE (Hamburg) on "The Significance of so-called 'Four Reactions' in the Diagnosis of Syphilitic Organic Nervous Disease," and was of immense value to Congress, in so far as it taught the methods of other schools, and Dr. LATHAM (Sydney) demonstrated the "Phase I reaction" to the Section of Neurology.

Drs. JOHNSON and WALLACE (Sydney) read a paper on "The Use of Salvarsan in Treatment of Certain Nervous Diseases with a Positive Wassermann Serum Reaction." It was stated in this paper that for fourteen months the Wassermann reaction was done in all the admissions into one of the Hospitals for the Insane (Callan Park), 452 in number, and of these 65 gave a positive reaction, 16 were general paralytics, 11 cases of acute mania, 9 chronic mania, 8 delusional insanity, 7 melancholia recent, 6 organic dementia, 2 (each) melancholia, chronic, and epilepsy, and 1 (each) confusional insanity, insanity with gross lesion, congenital mental defect, and dementia, senile. Salvarsan in cases of general paralysis, both recent and well-advanced, produced no improvement, and two cases of tabo-paralysis became more demented. The results showed that once dementia had appeared, salvarsan hastened the process of degeneration.

Dr. MOTT (London) sent a paper on "The Relation of Head Injury to Nervous and Mental Diseases." The paper arrived just as Congress was concluding its

labours, and was therefore not on business list. It has, however, been specially printed and circulated amongst members of Congress.

It will thus be seen that in a short space of time a large amount of work was got through, and though the Section was well supported locally, its work was greatly strengthened by the support it had received from the other side of the equator. The *Australasian Medical Gazette*, in its leading article on the Congress, stated that "the innovation proved a distinct advantage, and is one to be recommended for adoption in future congresses."

OBITUARY.

DR. JAMES MURRAY LINDSAY.

The death of Dr. Murray Lindsay removes from the ranks of the Medico-Psychological Association one of its senior members, he having been elected so far back as 1859.

Throughout the greater part of this long period Dr. Lindsay took a very active part in the affairs of the Association, frequently serving on the Council, and taking a keen interest in all that related to the welfare of the insane and of asylum officers. This is especially manifest in his Presidential address, given in 1893, which was of an eminently practical nature, dealing with many questions which have since been solved in the affirmative.

Dr. Lindsay's medical career commenced with his taking the licentiatehip of the Edinburgh College of Surgeons in 1859, the same year in which he joined the Association. He subsequently became F.R.C.S. and F.R.C.P. Edinburgh, and M.D. of St. Andrews. His earliest posts were at Camberwell House, where he was associated with the late Dr. Paul, and at the Wells County Asylum. Later on he succeeded Dr. Sankey as Medical Superintendent of the Female Department of the Hanwell County Asylum. This institution, at that time, was governed on the departmental system. In this system, or want of system, each principal officer, the two medical superintendents, the matron, the steward, the engineer, and the clerk of the asylum were practically independent, although theoretically under the control of the medical superintendents. That such a state of things was not conducive to the highest welfare of the patients is not to be wondered at, or that it induced an intolerable amount of friction between the lay and medical officers. Dr. Lindsay, who had a strong and unyielding idea of his duty to his patients, ultimately found it desirable to seek another appointment. This he found, as superintendent of the Derby County Asylum, a post which he held until his retirement, on pension, some years since.

Dr. Lindsay's sturdy maintenance of his principles and opinions commanded the respect even of those who differed from him; while his kindly disposition gave him many staunch friends among his co-workers and endeared him to his patients. The Medico-Psychological Association owes much to his steady work during the most strenuous period of its development, and its oldest members will always entertain his memory with sincere respect.

THE ROYAL INSTITUTE OF PUBLIC HEALTH.

Patron: His Most Excellent Majesty King George V.

BERLIN CONGRESS, 1912.

[We append an invitation which has been received by the General Secretary of the Medico-Psychological Association. He requests any member, who proposes to attend the meeting and is willing to act as a Delegate, kindly to communicate with him as soon as possible.]

SIR,—I have the honour to inform you that the Council have accepted an invitation from the Ober Burgomeister (The Lord Mayor) of Berlin to hold their Congress in 1912 in that city, from Thursday, July 25th to Sunday, July 28th inclusive, and

a Local General Arrangements Committee has been formed consisting of representatives of the Royal Ministry of the Interior, the Imperial Board of Health, the City of Berlin, the Medical Officers of The Head-Quarter Staffs of The Army and Navy, the University of Berlin, the Medical and Hygienic Societies of Berlin, etc., to promote the success of the meeting.

I am desired by the Council to invite the Medico-Psychological Association to appoint one or more representatives to attend the meeting.

b. The Congress will be under the Presidency of The Right Hon. the Earl Beauchamp, K.C.M.G., LL.D., His Majesty's First Commissioner of Works, and will be conducted in the following Sections :

A. *State Medicine*.—President: Sir T. Clifford Allbutt, K.C.B., M.D., LL.D., D.Sc., F.R.S., Regius Professor of Medicine in the University of Cambridge.

B. *Bacteriology and Comparative Pathology*.—President: Professor G. Sims Woodhead, M.A., M.D., LL.D., F.R.S.Ed., Professor of Pathology in the University of Cambridge.

C. *Child Study and School Hygiene*.—President: Sir James Crichton-Browne, M.D., D.Sc., LL.D., F.R.S., Lord Chancellor's Visitor in Lunacy.

D. *Military, Colonial and Naval*.—President: Major Sir Ronald Ross, K.C.B., M.D., D.Sc., F.R.S., Professor of Tropical Medicine in the University of Liverpool.

E. *Municipal Engineering, Architecture and Town Planning*.—President: P. C. Cowan, D.Sc., M.Inst.C.E., Chief Engineer of the Local Government Board, Ireland.

The various Congress and Sectional Officers will also include gentlemen of German nationality occupying distinguished scientific and municipal positions.

Facilities will also be afforded for visiting the various Public Health and Educational Institutions in Berlin, etc., in connection with the Imperial Board of Health, the Municipality, the University, etc., and it is confidently hoped that the Congress and the unique opportunities which will thus be given to representatives of universities, learned bodies, county councils, municipalities, and other authorities of the United Kingdom, for becoming practically acquainted with continental institutions and their work, will not only be of much interest, but of the greatest value.

Arrangements are being made for travelling and hotel accommodation at reduced charges.

In order to facilitate the arrangements which must necessarily be made, I shall be obliged if you will kindly return enclosed form at your earliest convenience.

I am, Your obedient Servant,

JAMES CANTLIE,

Hon. Secretary.

THE LIBRARY OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Library is open daily for reading, and for the purpose of borrowing books. Books may also be borrowed by post, provided that at the time of application threepence in stamps is forwarded to defray the cost of postage. Arrangements have been made with Messrs. Lewis to enable the Association to obtain books from the lending library belonging to that firm should any desired book not be in the Association's Library.

The following books have recently been added to the Library:

McDougall.—*Body and Mind*.

Angell.—*Psychology*.

Application for books should be addressed to the Resident Librarian, Medico-Psychological Association, 11, Chandos Street, Cavendish Square, W. Other communications should be addressed to the undersigned at Long-Grove Asylum, Epsom.

BERNARD HART,

Hon. Secretary Library Committee.

NOTICES BY THE REGISTRAR.

List of successful candidates for the Preliminary and Final Nursing Examinations held in November, 1911.

PRELIMINARY EXAMINATION, NOVEMBER, 1911.

Successful Candidates.

Valkenberg, South Africa.—George A. M. Bury, Robert H. McCarter, David Siberry, Mary T. Farmer, Magdalena Gronlwald, Rhoda Austin, Catherine D. Littlejohn, Beryl C. Morcom.

Bloemfontein, South Africa.—Winifred Hartley, William C. Lamb.

Fort Beaufort, South Africa.—Clarace G. Roe, Amy Neilson, Martha Basch, Eliza P. Smith.

Pretoria, South Africa.—Grace V. Bennett, George F. De Kock, Peter van Kerkhof.

Kent County, Maidstone.—Helen Blowes, Adelaide Hills, Annie E. Stephens, Sarah M. Edwards.

Middlesex County, Tooting.—Gwendoline Jenkins.

Northampton County, Berry Wood.—George H. Train, Frederick Warsop, Harry S. Bailey, Alfred S. Harrison, Annie J. E. Owen, Lillie H. Hughes, Amy Hurst, Annie M. Davies, Minnie Hutchinson, Frances M. Collins, Kate B. Howes, Florence M. Porteous.

Staffs County, Cheddleton.—Elsie M. Welch, Cornelia V. Petersen, Annie K. Blackburn, Catherine Mackintosh, Mary J. Hodgson, Maud Nelson, Catherine McDonald.

Yorks, W.R., Menston.—Ethel G. Smith, Frances Holloway, Mary Ayrton, Annie Smith.

Yorks, W.R., Wakefield.—Vincent Elgar, Arthur Elstone, Ernest Wright, Thomas W. Marshall, Wilson Cartwright, Arthur Dickinson, Elizabeth A. Halls, Theresa M. Phelan, Mary A. Jackson.

Derby Borough.—Walter Blood, Wm. Thomas Taylor, William T. Wright, Edith A. Tatton, Eveline M. Murrell.

The Retreat, York.—Catherine A. Macdonald, Agnes C. McLauchlan, Alfred Broadbent, Harry E. Mills, Elsie R. Sharp, Susie M. E. Evans.

Camberwell House.—Elsie M. Woodward, Margaret A. Swann, Annie B. MacLeod.

Argyll and Bute.—Donald Martin.

Aberdeen District.—Jeanie Robertson.

Craig House, Edinburgh Royal.—John A. Webster, Euphemia A. Nicholson, Louisa E. McCutchen, Elizabeth Murray, Murgo C. Forrest.

Edinburgh District, Bangour Village.—Annie Gertrude Brown.

Edinburgh Royal.—Annie S. Sim, Annie R. Bruce.

Glasgow, Gartloch.—Mary M. Ross, Mary A. W. Allan, Mary O'Donnell, Elizabeth S. Ross.

Inverness District.—Anne M. Campbell.

Glasgow, Woodilee.—Marion P. Chapman, Rose Rattray, Elizabeth L. Reid, Jessie Hanlon.

Lanark District.—Mary B. M. Moir, Annie F. P. Forbes, Bessie Young, Susan W. Boyd.

Montrose Royal.—Christina Ingram, Bella Walker.

New Loughton Hall.—David Shaw.

Stirling District.—Agnes Fullerton, Agnes R. Sutherland, Catherine Maclaren, Charlotte H. Robertson, William Smith, Emma Armstrong.

St. Patrick's Hospital, Dublin.—Lizzie Molyneux, Mary Solon, Leonard O'Shea.

Devon County.—Eva Mary Endicott, Elsie Coombe, Florence Parnell.

Warwick County.—Edith E. Hunt, Mary Anne Tiernan.

FINAL EXAMINATION, NOVEMBER, 1911.

Successful Candidates.

Valkenberg, South Africa.—William P. Emmett, May R. Markey, Catherine O'Connor, Letitia Yelverton.

Pretoria, South Africa.—Elizabeth J. Basch, David S. Mocke, Stephen Drummond, Philip H. Strike.

Derby County.—Rose Smalley, May Wilkinson, Kattie Finn.

Durham County.—John J. Harding, George Hopps, Francis J. Prior, Henry Barker.

Essex and Colchester.—Kate Bolton Clark.

Kent County, Maidstone.—Kathleen Hilda Miles.

Lancashire County, Rainhill.—Margaret A. W. Ross, Sarah Livsey, Alice Howarth.

London County, Banstead.—Annie A. M. Moss, Edith M. Powell.

Middlesex County, Tooting.—Rose C. Johnson, Alice Wenham.

Salop County, Bicton.—Miriam Jones, Katherine M. Roberts.

Staffs County, Cheddleton.—Ethel C. Armitage, Ida I. Bradshaw, Eleanor A. Horne, Minnie Lovatt.

Worcester County, Barnsley Hall.—Harry Lait.

Yorks, Scalebor Park.—Edith Waters, Elsie Kear, Martha Sygrove, William H. Holland, Elizabeth Laurie.

Birmingham City, Winson Green.—Edgar James Hunt.

Derby Borough.—Alfred Gutteridge, Mary J. Gutteridge, Elizabeth Maclean, Elizabeth Ayre.

Leavesden.—Margaret Snowdon, Eva H. McGregor, Edith G. Bradley, Mary K. Finnegan, Susannah V. Bowker, Dorothea T. Foley.

Sunderland Borough.—Janet Lackenby, Dora Blenkinsop, Joseph McCulley.

West Ham Borough.—Francis J. Botwright, Nellie E. Beckford, Daisy V. Piper, Catherine M. Braddy.

Bethlem Royal Hospital.—Horace Kenward.

Camberwell House.—Mary G. Thorowgood, Jessie M. Hounsell, Ethel M. Richardson, Gladys P. Harvey.

Redlands, near Tonbridge.—Alfred Philip Bowditch.

Aberdeen Royal.—Jeanie Allan, Margaret A. Ramsay, Edith Pirie.

Argyle and Bute.—Mary Hillhouse.

Edinburgh Royal.—Elizabeth C. Taylor, Edith W. Bain.

Edinburgh Royal, Craig House.—Edith B. Turner.

Edinburgh District, Bangour Village.—Jane Gerrard, Jane Crawford, Elizabeth G. Storey, Kathleen J. Fleming.

Glasgow, Woodilee.—Isabell M. Campbell, Peter Innes, Margaret D. Thomson, Netta McCall, Euphemia Bryden, Annie Henderson, Jean Moncrieff.

Glasgow, Gartloch.—Isabella F. Thomson, Elizabeth K. Dickson.

Inverness District.—Margaret M. Bogie, Marion MacLaren, Mary MacRae, Hughina C. Barron, Daisy M. Crow.

Lanark District.—Constance M. Walker, Elspit H. MacLean, Jemima Baxter.

Midlothian and Peebles.—Helen Morrison, John McLaren, Janet Pender.

Montrose Royal.—Anna M. Cuthbert.

Paisley District, Riccartonbar.—Jeannie H. Campbell, Isabella Davidson.

Stirling District.—Elizabeth L. Macaulay, Ellen Scott, James McKenzie, Thomas Lockhart.

New Saughton Hall.—William Smith.

Enniscorthy District.—Patrick Dempsey.

Londonderry District.—Andrew Taylor, Michael McLaughlin.

Portrane Asylum.—Mary E. O'Connar, Mary K. McEntee, Mary Murray, Sarah Dolan.

Bloomfield House.—Bridgid Ward.

Warwick County.—Julia Tew, Annie Cooper, Leah Vaughan, Emily Gascoigne, Sarah Ann Smith, Jane Moore, Katie Briscoe, Annie Hingeley.

The next examinations will be held on the following dates. Preliminary—first Monday in May, May 6th, 1912. Final—second Monday in May, May 13th, 1912. The following are the questions that appeared on the papers.

Preliminary Examination, November, 1911.

1. What are the different kinds of bones which the skeleton is composed of? Mention as many examples as you can of each class.
2. What is internal bleeding? How would you act before the arrival of the doctor in a case of bleeding into the lungs?
3. A patient meets with a severe lacerated wound of the forearm—What is the immediate treatment?
4. Describe the structure of the skin.
5. What causes may produce fainting? How would you treat a patient in that condition?
6. Name any ductless glands you know, and describe their functions in connection with health and disease.
7. What is your idea of the method in which the lymphatic system does its work? Describe the course of the lymph-stream from the capillaries back to the heart.
8. Describe fully the nurse's duty in connection with the ventilation of an asylum day room, emphasising the external weather conditions which decide you in the steps you take at various periods of the day.

Examination for Nursing Certificate—Final Examination.

1. Mention the different varieties of cough and expectoration and the corresponding diseases which they indicate.
2. What varieties of conduct have you observed in insane patients?
3. How would you guard against suicide in an asylum? What special precautions would you have to take in a private house?
4. What are the boundaries and contents of the thorax?
5. What is melancholia? Mention some varieties of this malady and the chief danger attending it.
6. Under what circumstances may artificial respiration be required? Describe the mode of performing it.
7. Describe fully the preparations for a surgical operation including: (a) The room. (b) The table. (c) The patient.
8. What are asepsis and antisepsis? What antiseptics are used in your asylum and in what dilution? Mention any points which render certain of them specially suitable or unsuitable to different circumstances.

NOTICES OF MEETINGS.

Quarterly Meeting.—The next meeting will be held, at the invitation of Dr. C. Hubert Bond and by the courtesy of the Visiting Committee, at the London County Asylum, Long Grove, Epsom, on Thursday, February 22nd, 1912.

South-Eastern Division.—The Spring Meeting will be held, by the courtesy of Dr. Francis H. Edwards, at Camberwell House, on Tuesday, April 23rd, 1912.

South-Western Division.—The Spring Meeting will be held, by the courtesy of Mrs. Fox, at Brislington House, on Thursday, April 18th, 1912.

Northern and Midland Division.—The Spring Meeting will be held, at the invitation of Dr. Farquharson and by the courtesy of the Visiting Committee, at the Cumberland and Westmorland Asylum, Garlands, Carlisle, on Thursday, April 18th, 1912.

Scottish Division.—The Spring Meeting will be held on Friday, March 15th, 1912.

Irish Division.—The Spring Meeting will be held, by the courtesy of Dr. Rainsford, at the Stewart Institution, on Thursday, April 18th, 1912.

APPOINTMENTS.

Campbell, Roderic Alan, M.D.Edin., Assistant Physician, Crichton Royal Institution, Dumfries.

Cruikshank, John, M.B., Ch.B.Glas., Pathologist and Clinical Pathologist, Crichton Royal Institution, Dumfries.

Farries, J. Stothart, L.R.C.P., L.R.C.S.Edin., Medical Superintendent of the Minda Institution for the Feeble-minded and Epileptic, Adelaide, South Australia.

Krogh, A. L., M.B., Ch.B.Edin., Junior Assistant Medical Officer, Ayr District Asylum.

Molyneux, Benjamin A., M.B.Dublin, Assistant Medical Officer, Gloucester County Asylum, Barnwood.

Stephen, David, M.B., Assistant Medical Officer of the Lincoln Mental Hospital.

Taylor, Arthur L., M.B., B.Sc., Assistant Medical Officer to the Derby Borough Asylum.

Walford, Harold R. S., M.R.C.S., L.R.C.P.Lond., Second Assistant Medical Officer, Worcester County and City Asylum, Powick.

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VOL. LVIII.

Part I.—Original Articles.

The Cerebro-Spinal Fluid in Certain Mental Conditions.

(An Essay for which was awarded a prize by the Medico-Psychological Association, 1911.) By WILLIAM BOYD, M.D., Assistant Medical Officer, Inverness District Asylum.

THERE is a constant endeavour in psychiatry, as in other branches of medical science, to distinguish between organic and functional disorder. Year by year, in most of these other branches, the organic group becomes larger, the functional group smaller. But unfortunately the same cannot be said for psychiatry. When all is said and done, the term "functional disease" is largely a cloak for ignorance. Where there is disease there must be something to show for it, but if the changes are so subtle as to escape detection, we at once label the condition "functional." General paralysis was considered a functional disease until it was proved to have a very solid anatomico-pathological basis; indeed, until this proof was forthcoming it could hardly be said to exist as a definite entity at all. Until this process is extended to other forms of insanity, clear thinking in psychiatry is impossible. We are still far too prone to look only upon the mental side of the cases which come under our care, whereas we ought diligently to search for some physical causal factor that may be at work, and for corresponding physical changes that may give us a clue to such a factor.

LVIII.

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Dr. L. C. Bruce and the numerous workers who have followed in his steps have shown how fruitful a line of investigation this may prove in the case of the blood. It is quite as probable, however, on *à priori* grounds, that a study of the cerebro-spinal fluid, which comes into such intimate contact with every part of the central nervous system and plays the part of the lymph of the brain, as Mott (1) has pointed out, will yield results of equal value. And yet, up to the present, such results have been conspicuous by their absence except in the case of general paralysis. It is inconceivable, however, that the lymph of the brain should be normal when the brain itself is so profoundly affected as in the acute insanities, and the present research is an attempt to decide whether or not the negative results of some previous observers must really be regarded as final. Most of the work has been done in the Derby Borough Asylum, but a number of nervous and other diseases were investigated in Dr. Byrom Bramwell's wards in the Edinburgh Royal Infirmary. Altogether 170 punctures were made in 120 patients. The observations extended over a period of twenty-nine months.

A large amount of work has been done upon the cerebro-spinal fluid, but attention has been directed hitherto mainly to general paralysis and the allied parasyphilitic condition tabes dorsalis, and few references to the ordinary insanities are to be found; it is to these latter cases that I have devoted special attention.

On looking through the literature I have been struck by the fact that one rarely finds a description of the fluid on more than one occasion, or anything in the nature of a comparison between the different conditions of the fluid which may obtain in the same case on different occasions, and yet, in investigating the conditions of, say, the blood in various affections, no one would think of resting satisfied with a single examination. It is true that there is this important difference between the two cases, that a blood examination is a mere trifle, which may be repeated as often as desired, whereas a lumbar puncture is a definite surgical proceeding, entailing considerable discomfort to the patient, and in some cases (as will be seen later) very disagreeable after-effects. For these reasons it is sometimes impossible to get the patient's permission for a second puncture. Nevertheless it is very

desirable that series of observations should be made for two reasons: (1) A good indication is afforded as to the reliability of the technique; if fairly constant results be obtained, the technique is satisfactory for comparative purposes; (2) changes in the fluid are shown which may give very valuable indication of corresponding changes in the brain and its meninges.

Physical and Chemical Properties.

The normal cerebro-spinal fluid is clear and colourless, with a specific gravity of 1006 to 1008. It contains no albumen, but a trace of serum-globulin and albumose, and a substance which reduces Fehling's solution. This substance was considered until recently to be pyrocatechin, but authorities are now returning to the original view of Claude Bernard that it is glucose. The normal fluid is very poor in cellular elements, an occasional lymphocyte being met with, but never a polymorphonuclear cell. In disease the cells may undergo considerable change. Thus, in acute suppurative meningitis the fluid is found to be swarming with polymorphonuclear cells, and instead of being clear and limpid becomes thick, yellow and turbid. In the subacute and chronic affections of the meninges a lymphocytosis is the rule. It is probable that further work will show the exact type of mononuclear cell which is present to be of importance, but at present all such cells are classed together as lymphocytes, the small variety as a rule preponderating. The fluid is alkaline in reaction, the alkalinity being only half that of the blood. It contains chlorides, carbonate, phosphates, and urea in minute quantities. Any of the above may vary in disease, but in the present investigation attention has been mainly directed to the cytology, the protein content, and the Fehling-reducing power.

Cytology.

The method employed for enumerating the cells was that of Widal, which consists in centrifuging 5 c.cm. of the fluid until all the cells have been drawn to the bottom of the tube, the time required depending on the speed of the centrifuge, decanting the supernatant fluid, and inverting the tube for half a minute so as to drain it well; the bottom of the tube is

then scraped with a capillary pipette, and the drop thus obtained blown on to a cover-glass, care being taken not to spread it out, otherwise the concentration is seriously affected. It is allowed to dry, and the film may be fixed in a mixture of equal parts of absolute alcohol and ether, after which it is stained with methylene blue, Jenner's stain, or Pappenheim's pyronin-methyl-green, the last-named having a selective action on the plasma-cells met with in general paralysis. In nearly every case ten consecutive fields have been counted under a magnification of 450 diameters and the average taken.

It has been objected to this method that it is inaccurate, and it must of course be admitted that it does not give the total number of cells present in a given quantity of fluid, but, after all, what we want to know is the relative numbers in different cases, and on different occasions in the same case. With the object of attaining greater accuracy Fuchs and Rosenthal in 1904 used the ordinary hæmocyto logical technique, and by means of a pipette, counting chamber and staining fluid estimated the number of cells per cubic centimetre. It has been shown, however, that when only a few cells are present the error varies from 30 to 90 *per cent.*, and the field method of Jones yields no better results.

Proof of Accuracy of Method Used.

As has already been pointed out, the accuracy of a method can be gauged to a certain extent by comparing the results obtained on different occasions from the same case. Of course, it is always possible that variations may be due to changes in the fluid itself and not to inaccuracy in the technique, but if the case presents exactly the same clinical symptoms throughout, and if only a short interval of time separates the different examinations, then it may fairly be claimed that the results will afford a satisfactory indication as to the reliability of the technique.

It is with this object that Table I has been prepared. A study of this table will show that in only one case (No. 6) does a serious discrepancy occur which cannot be explained. It is true that when the cells number several hundreds there are some marked differences in the counts, but from the practical point of view this is of little import, because what we really

want to know is (1) if a lymphocytosis is present, and (2) if it is marked in extent. In No. 18 the eighty-four cells were present when the fluid was withdrawn shortly after the patient had had a severe epileptic fit. What may be the relation between the two conditions—fit and cytositis—it is impossible in the present state of our knowledge to say, but that there is some relationship, such as a common causal factor, I am convinced. The difference between the first two counts in No. 19 is capable of a similar explanation, and the case will be considered more fully later. In No. 6 there was an interval of six months between the two punctures, but the condition of the patient had not changed in the interval, and it is probable that the low count on the first occasion was due to faulty technique. With this single exception, however, the results have been so uniform as to justify one in saying that the Widal method is perfectly satisfactory for purposes of comparison. When the initial count has shown no cellular increase, the subsequent counts, with this one exception, have also proved normal. When, on the other hand, a lymphocytosis has been present on the first occasion, it has always been met with on subsequent occasions, in some cases varying considerably, as was only to be expected, but in others maintaining a remarkably constant level. It would be interesting to learn if a similar series of observations with the method of Fuchs and Rosenthal yielded any more constant results.

What constitutes a Lymphocytosis?

Having decided upon the technique to be used, the next point to be considered is: What constitutes a lymphocytosis, *i.e.* within what limits may the cell-count be considered normal? Here, again, there is considerable difference of opinion. In the cases where the cells can be counted by the hundred there is no difficulty, but it is in the doubtful cases that some definite standard must be fixed upon. According to Purves Stewart (2), after 5 c.cm. have been thoroughly centrifuged not more than four cells should be seen in the field with a magnification of 450 diameters. I consider that with a similar magnification nine or ten cells may be present without justifying one in calling the fluid abnormal, but that anything above that number must be regarded as pathological.

Turning now to the results obtained, as shown in Table II, we must divide the cases into two classes :

- (1) A group containing the parasyphilitic diseases—tabes dorsalis and general paralysis.
- (2) A group comprising the remaining cases.

(1) *Cytology of the Parasyphilitic Conditions.*

There can be no question that the earliest and most reliable indication of the onset of general paralysis and tabes dorsalis is afforded by the cerebro-spinal fluid. Since Widal, Sicard, and Ravaut (3) in 1900 first described the presence of a lymphocytosis in these diseases, a mass of evidence has been accumulating, which goes to prove that in almost every case there is an increase of the mononuclear cells, an increase which may be large or small, but which is distinct, and which, moreover, is most marked in the early stages of the disease.

My own results fully bear out the constant character of the lymphocytosis in tabes and general paralysis. From a study of Table II it will be seen that in every case of general paralysis the cell increase was marked, in no instance falling below 40, and in one remarkable case reaching the unprecedented number of 3400. This case was a typical one of general paralysis in an early stage, presenting no unusual features. The fluid was examined as many as seven times and by independent observers, and on each occasion this enormous lymphocytosis was present. I draw attention to this case because, so far as I have been able to ascertain, this leucocytosis easily holds the record.

In only two cases of tabes was the count below 20. In one of these the only symptoms were loss of the knee-jerks, the Argyll-Robertson pupil, and syphilitic ulceration of the larynx. The other presented a perfect clinical picture of the disease, and yet on the two occasions that the fluid was examined the count never rose above 14. The case of taboparesis and the other nine cases of tabes all showed a marked lymphocytosis.

Thus in every case of tabes and general paralysis a distinct lymphocytosis was present, and in the great majority of the cases it was well marked. These results are in perfect accord with those of previous observers.

(2) *Cytology of the Ordinary Insanities.*

Turning now to the second group, which to me is by far the more interesting, and yet has had much less attention paid to it, one is confronted with a much more difficult problem, and it is here that the results of other observers are of great interest. Pegna(4) and Purves Stewart(5) both assert in the most categorical way that the cytological examination of the cerebro-spinal fluid in mental disease always yields negative results, and Winifred Muirhead(6) did not obtain a single positive result in seventy-seven cases of the ordinary psychoses. Williamson(7), on the other hand, got a high cell-count in six cases of insanity divided between epileptic and acute mania, and he considers that a cellular increase may occur in any of the conditions of excitement.

It is of importance to note that in ordinary physical disease, as distinguished from insanity, a cytositis may occur in a number of toxic conditions, such as tubercular meningitis and herpes zoster. Some interesting observations have been made quite recently upon that most typically toxic of all nervous diseases, namely, acute anterior poliomyelitis, and Flexner and Clark, of New York, describe a well-marked cellular increase in this condition, both experimentally in monkeys and clinically in man.

The consensus of opinion appears to be, therefore, that a high cell-count is met with in the nervous lues and a few other physical conditions, but that it never occurs in mental disease.

To these conclusions my own results are strongly opposed. From Table II it will be seen that out of a series of 119 cases in 71 was the cell-count below ten, whilst in 48 it was above ten, and therefore to be considered pathological. If from these 48 cases are subtracted 10 cases of tabes, 1 of tabo-paresis, 12 of general paralysis, and 1 of acute suppurative meningitis, there is left a group of 24 cases in which the cell-count was above the normal, and in which there was no history or evidence of syphilis, except in the case of aneurysm, which was definitely syphilitic, and two of the cases of cerebral tumour. It must not be imagined that these figures—24 out of 119—represent the true proportion of such cases to the whole, for just as the general paralytics were picked out,

so were those cases chosen which seemed likely to fall into one of the classes about to be described. Nevertheless, the fact remains that in a small asylum quite a number of such cases could be found.

Of these 24 cases those of aneurysm, chronic mania and alcoholic excitement may be dismissed with a word. The cell-count was 14 in the two former, and 12 in the latter, an excess over the normal which is too small to justify one in drawing any conclusions; moreover, in the first case the syphilitic element was present, while the other two were just those conditions in which, judging from Williamson's observations, one would expect a slight cellular increase.

There are now left 21 cases which showed a lymphocytosis, and this number is made up as follows: Congenital imbecility 2 cases, cerebral tumour 3 cases, epileptic insanity 5 cases, a group which I have provisionally called dementia præcox 10 cases, and a case of melancholia, which very possibly should be included in the preceding group.

In one case of congenital imbecility the cell-count was 25, in the other it was 18 on one occasion, 19 on the next. It may be mentioned that Otto Rehm also obtained a positive cytological result in two cases of imbecility.

Of the three cases of cerebral tumour, one was diagnosed as a gumma in the region of the optic chiasma, and it produced a lymphocytosis of 21. Under anti-syphilitic treatment all the symptoms disappeared and the lymphocytosis fell to 10.

The second was also a case of gumma of the brain, with a lymphocytosis on admission of 110. The patient was obviously suffering from some acute cerebral condition, as there was severe headache, loss of power in the left arm, rapid loss of sight, and a condition of increasing coma, but owing to the marked lymphocytosis and a history of an old syphilitic left hemiplegia which was successfully treated two years previously, energetic anti-syphilitic treatment was adopted. The coma became deeper, however, and in five days the patient died. Shortly before death the cerebro-spinal fluid was again examined and was found to be turbid, the turbidity being due to enormous numbers of polymorphous leucocytes. A differential count was made and showed that there were 57 polymorphs to 43 lymphocytes. At the autopsy the remains of an old gummatous lesion were found at the posterior

end of the first right frontal convolution—this was the cause of the lymphocytosis. Two acute abscesses were present, one in the right motor area, the other in the left occipital lobe, and the pus from the latter abscess had made its way into the lateral ventricles, and thence to the base of the brain through the locus perforatus posticus—hence the polymorphonuclear leucocytosis. The importance of this case lies in the fact that the change in the cerebral condition was faithfully represented by the change in the cerebro-spinal fluid. In both of these cases, therefore, the lymphocytosis was due to a syphilitic lesion.

In the third case, however, there was no history or evidence of syphilis. Anti-syphilitic treatment had been tried for years without avail. At the autopsy the tumour, which involved the pituitary body, was found to present none of the characteristics of a syphilitic lesion, and on microscopical examination it showed the appearance of a mixed-celled sarcoma. Yet the cell-count reached the enormous number of 1630. Here we have a demonstration that a very marked cerebro-spinal lymphocytosis may be present quite apart from any syphilitic process.

Of the five cases of epileptic insanity in which a lymphocytosis was observed, two had between 20 and 40 cells, one having 30 on one occasion and 20 on another, while the other had 29 on the first occasion and 28 on the next. As a number of months elapsed in each case between the two examinations, it is obvious that the high cell-count could not be put down to a mere accident. In neither of the cases was a trace of excitement present, nor were they subject to periodic attacks of excitement. In the other three cases the increase in cells was more marked. One had a count of 54, which fell to 28 on a subsequent occasion. In the second there were 84 cells, but in this particular case the fluid was withdrawn shortly after the patient had taken a fit. On three subsequent occasions the counts were 14, 23 and 38. I am not prepared to say what relation the cytosis bore to the fit.

The third case was altogether exceptional, and is really in a class by itself. The patient was a man, *æt.* 53, who was admitted in September, 1910, in a restless excited condition, with marked delusions and hallucinations of a religious nature. Three years previously he had sustained an injury to

the head, and since then had had three or four fits of an epileptiform nature, but had not had any for some months prior to admission. An examination of his cerebro-spinal fluid on admission showed that he had only 6 lymphocytes per field, and these were all of the small variety. He soon settled down and became quite quiet and rational until March 10th, 1911, when he had a severe epileptic fit, became very restless, noisy and excited, and developed the most vivid visual and auditory hallucinations. His cerebro-spinal fluid was examined on March 13th, and it was found that he had a lymphocytosis of 39; of these, 68 per cent. were small lymphocytes and 32 per cent. were large lymphocytes. The fluid was examined on March 14th, 15th, 16th, and 17th, and a lymphocytosis was present on each occasion, the last count being one of 80. The differential count was very constant throughout. This is the only case I have encountered, with the exception of the case of cerebral gumma and abscess already described, in which a marked change in the cerebro-spinal fluid occurred in the course of the disease. Here, again, the task of explaining the relationship between fit and cytosis is an almost impossible one in the present state of our knowledge; but I consider that the cytosis was not due directly to the fit, but that both fit and cytosis had a common toxic origin.

Out of a series, therefore, of 15 cases of epileptic insanity, in five cases was there a well-marked increase in the cell-count, this increase being present, although varying in extent, on the different occasions on which the fluids were examined.

There are now left ten cases of dementia præcox and one of melancholia. These are the most important and at the same time the most difficult cases of the series. It will be noted that in most of the cases of dementia præcox the lymphocytosis was moderate although quite decided; but in one case it amounted to 121, being 85 some months later. I have called the cases dementia præcox, but I do not wish to imply that they all presented perfect clinical pictures of that disease; rather have I classed them thus, because they were all young adults. The symptoms had a vagueness which one is only too apt to associate with dementia præcox, and one of the chief features was that lack of emotional response which is stated to be one of the most important points in the diagnosis of this condition.

I am not concerned, however, with questions of nomenclature. What I wish to emphasise is that here is a group of cases bearing a family resemblance to one another, in every one of which there was a marked change in the fluid which bathes the brain and receives the products of neuronal metabolism. Some of these cases were hopelessly demented, others were progressing towards dementia; but a few seemed to have remarkably little the matter with them. These last were dull, listless and apathetic, with little interest in life, but they were certainly not cases in which one would expect to find evidence of any profound change in the nervous system. The first case or two which I encountered caused me great surprise, but when I came to recognise the symptoms—they are hardly worthy of the title of syndrome—I found that I was able to forecast with some degree of certainty the cases in which this change would be found; they nearly all belonged to the “lymphatic type.” According to Stoddart (9) dementia præcox may be regarded from one point of view as a failure in evolution, and he points out certain similarities between that condition and idiocy and imbecility. (In two of my cases of imbecility there was a moderate lymphocytosis.) One got the impression that in every one of these 10 cases there was a congenital element present, more marked in some cases than in others. In 5 cases the fluid was examined on more than one occasion, and each time an increased cell-count was present. A blood examination was made in every case, but no abnormality was detected.

These cases are, to my mind, of such importance that I deem it advisable to give a brief summary of the salient points in each case.

CASE 1.—A. S—, female, æt. 21. Paternal aunt is insane. Admitted to the Derby Borough Asylum in October, 1909. For a year previously she had been losing energy and interest in life, and would sit for hours gazing vacantly in front of her. On admission she was dull, stupid, and apathetic, with slow mentation. She was in poor physical condition, but without any actual disease. Habits wet and dirty. She became somewhat brighter, habits improved, and she began to employ herself, but is now *in statu quo*. She is in a dull, phlegmatic condition, with complete loss of memory. There is not a trace of emotional response; thus, when told of the death of her mother,

to whom she was much attached, she showed no sorrow or grief; joy is similarly unknown to her. The cell-count on three different occasions was 31, 54, and 26. The protein content was increased.

CASE 2.—A. S—, male, æt. 25. A half-sister is insane. Admitted in July, 1910. He is said to have been rather "soft" and below the average intelligence all his life. On admission he was stupid and confused, understood little of what was said to him, but assented in a facile way to any suggestions that were made. Habits wet and dirty. He remained in this condition for about a year, and then improved to a certain extent. At present he is weak-minded and facile, and seems to be incapable of experiencing joy or sorrow. The cell-count on two occasions was 121 and 85. The protein content was not increased.

CASE 3.—H. W—, male, æt. 21. On admission, April, 1910, he was very stupid and confused, but the salient feature of the case was his silliness—his laugh was an inane cackle, he made absurd grimaces, and indulged in the most ridiculous antics. He developed katatonic symptoms, such as *flexibilitas cerea*, and struck attitudes all day long. He showed, in addition, symptoms of negativism. After nine months he began to improve, but is still childish and simple, with impaired memory. The cell-count was 20, and the protein content was not increased.

CASE 4.—E. B—, male, æt. 30. A brother is insane. Patient was a sharp and clever youth up to the age of seventeen, when he began to degenerate both physically and mentally. He was admitted in January, 1910, and it was found that he had not had his clothes off for a year. He was dull and apathetic, and seemed to have little hold upon life. He has improved considerably, and is now able to converse rationally and to employ himself usefully, but he is still simple, facile, and childish. The cell-count was 41, and six months later it was 27. The protein content was not increased.

CASE 5.—A. M—, male, æt. 21. Has always been of a weak type. Admitted in February, 1909, in a confused condition, staring vacantly about him, rambling and incoherent in his talk, with delusions of persecution. He remained in this condition for a year, and then began to get more rational. He can now talk coherently, and works in a mechanical way, but

is facile and simple-minded. The cell-count was 20, and the protein content was not increased.

CASE 6.—A. K. W—, female, æt. 33. Father was insane. Patient has always been of a highly strung, neurotic temperament. She broke down under the strain of nursing, became rambling, foolish, and unduly sentimental, and finally grew extremely violent. Since admission (January, 1911) she has rapidly gone downhill, her habits are faulty and degraded, and she seems to be passing into a condition of dementia. She has motor symptoms of the katatonic type, such as *flexibilitas cerea*, echolalia, stereotypy, and negativism to a marked degree. The cell-count was 70, and the protein content was not increased.

CASE 7.—F. H—, female, æt. 25. Paternal aunt and grand-aunt were insane. Admitted in April, 1909, and was then depressed, suspicious, and delusional. At times she is noisy, excited, and abusive. She has been steadily drifting into dementia, and the loss of emotional reaction is very marked in her case. The cell-count was 19, and the protein content normal.

CASE 8.—T. P—, male, æt. 34. Admitted in 1904. He was transferred from another asylum, where he had been for a year. He was said to have been always somewhat weak-minded, and on admission here was diagnosed as a case of primary dementia. He is now in a condition of profound dementia, and leads a vegetable existence. The cell-count was 15, and on a subsequent occasion it was 14. The protein content was normal.

CASE 9.—P. J—, male, æt. 35, but was only 19 years old when admitted. Prior to admission he was dull, depressed, and seclusive, shutting himself up, and refusing to associate with other boys. On admission he is said to have been dull and lethargic, furtive and suspicious. He showed no signs of improvement, and gradually drifted into a condition of profound dementia. The cell-count was 26, on two subsequent occasions being 21 and 22. The protein content was normal.

CASE 10.—F. H—, male, æt. 42, but was only 23 years old on admission. There was hereditary predisposition to insanity. He was formerly a medical student in Edinburgh University, but broke down and was admitted in a state of acute excitement. He soon became quiet, but remained in a foolish, childish condition, laughing and talking to himself,

striking attitudes, making absurd gestures, and gradually becoming more and more demented. He is now profoundly demented and extraordinarily incoherent. The cell-count was 23 on one occasion, 33 on another. The protein content was not increased.

There remains to be considered the very interesting case which I have placed under the heading "melancholia," but here, again, the name is apt to be misleading. Indeed, I am inclined to think that it would be more correct for some reasons to place her in the class just described ; she is certainly not a typical case of melancholia.

The patient is a woman, æt. 28 years, who for some months prior to admission had been listless and somewhat depressed, but her chief characteristic seemed to be that she had lost her hold upon life, and did not care very much one way or the other what happened to her. She remained dull and apathetic for some time, and then gradually began to take an interest in what went on around her, and to occupy herself usefully, but even now (nine months later) her emotional reaction is very low. At no stage, however, could one have said definitely that she was insane, for the depression hardly attained to pathological limits. And yet there were very marked and constant changes in the cerebro-spinal fluid. It was examined on four occasions at intervals of two or three months, and on each occasion a very great cellular increase was present, the figures being 103, 340, 120, 270. The mental improvement has, therefore, not been accompanied by a corresponding change in the cerebro-spinal fluid. The protein content was distinctly increased each time. In this case there was no history of syphilis or of miscarriage, and the most thorough examination failed to reveal the slightest evidence of syphilitic infection. The nervous system appeared to be perfectly normal.

Summary of Cytological Results.

- (1) For practical purposes of comparison between different cases the field method of Widal is, on the whole, "satisfactory."
- (2) Repeated observations on the same case sometimes yield results of great value.
- (3) The results obtained in the parasyphilitic conditions were in accord with those of other observers. In every case of

general paralysis there was a marked cellular increase, and in only two cases of tabes was it not well marked.

(4) In one case of non-specific cerebral tumour there was an enormous lymphocytosis. A very high cell-count, therefore, does not necessarily imply the presence of nervous lues, as has been considered hitherto.

(5) Conditions of excitement seem to have no influence on the cell-count ; in thirteen cases of acute mania the count was normal every time, and in only one case of chronic mania was it raised, and that only to a very slight extent.

(6) Certain cases of epileptic insanity showed a lymphocytosis, but in what way they differed from cases in which the fluid was normal has not been determined.

(7) Two cases of congenital imbecility without evidence of syphilis gave a positive result.

(8) Ten cases bearing certain features in common, together with an eleventh case closely resembling them, gave a well-marked cellular reaction. These cases bore no relationship to syphilis, to epilepsy, or to any form of excitement.

Protein Content.

Many methods have been used for estimating the protein content of the cerebro-spinal fluid, but the majority of these have proved unsatisfactory. In the present investigation two recent methods have been employed, and results of considerable interest have been obtained. These methods are the butyric acid test of Noguchi, and the ammonium sulphate ring test of Ross and Jones. Both of these tests depend upon precipitation of the globulin present, which constitutes the main bulk of the protein. Before applying either test it is essential to make certain that there is no blood in the fluid.

Noguchi's test consists in the addition of 5 c.cm. of 10 per cent. butyric acid to 2 c.cm. of cerebro-spinal fluid with the application of heat, 1 c.cm. of a 4 per cent. solution of sodium hydrate being then added with a further application of heat. A positive result is indicated by the appearance in a few minutes of distinct flocculi, which are very fine at first, but gradually become coarser, and eventually fall to the bottom of the tube in the form of a precipitate. It has been claimed that this test is specific for general paralysis and tabes.

In the Ross-Jones reaction 1 c.cm. of cerebro-spinal fluid is run on to the surface of 2 c.cm. of a saturated solution of neutral ammonium sulphate. A positive reaction is indicated by the appearance of a ring at the junction of the two fluids, a ring which ought to be clear cut and of the thickness of a sheet of paper. An indistinct haze is taken as being negative. In order that the faintest ring may be detected it is essential that powerful indirect illumination, together with a black background, be used. The time in which the ring appears varies in different cases. I have taken five minutes as the limit. If the ring does not appear in that time the test is regarded as negative.

In order to make the test a quantitative as well as a qualitative one the fluid was diluted, and that degree of dilution noted with which the ring could just be obtained. This appears to be as simple and satisfactory a method of quantitative examination as any that has hitherto been used. In carrying out this method it is of the utmost importance that the conditions under which the test is performed should be constant, for if varying illumination and background be used the results will be found to vary correspondingly. I tested the accuracy of this dilution method by applying it to the fluid of the same case on a number of different occasions, and the results are embodied in Table III. From this table it will be seen that in the majority of cases there was remarkably little variation in the results, and this marked uniformity leads one to venture the opinion that in the dilution method we have a simple and accurate means of estimating the protein content.

Turning now to the results obtained by these two methods, we find that in general paralysis and tabes, the results, as shown in Tables IV and V, are identical with those obtained by previous observers, there being in every case a very distinct increase in the protein content. In one case of general paralysis and in one case of tabes so great was the amount of globulin present that a distinct reaction was obtained with the ammonium sulphate test when the fluid was diluted twelve times. On the other hand, one typical case of general paralysis with a large lymphocytosis only gave a positive reaction with a dilution of 1 in 2, and as in seven other cases of insanity a positive reaction was obtained with a similar dilution, repeated examination of this case was carried out. On five occasions a

similar result was obtained, but on a sixth occasion a ring was obtained with a dilution of 1 in 4.

In the case of the non-syphilitic diseases, however, my results are opposed to those of certain previous observers.

From Table IV it will be seen that a positive or doubtful Noguchi reaction was obtained in one case of pituitary tumour (non-syphilitic), in 2 out of 10 cases of dementia præcox, in 4 out of 15 cases of epileptic insanity, and in 1 out of 9 cases of melancholia. This last case is the one which has already been mentioned as closely resembling the dementia præcox group; the reaction was positive each time the fluid was examined. In none of these cases, however, was it anything like so marked as in the cases of general paralysis and tabes dorsalis. In 81 other cases the test was negative. In only one case (epileptic insanity) was a positive result unaccompanied by a lymphocytosis.

The ammonium sulphate test was positive in 46 out of 87 cases—at least a ring was obtained (see Table V). Subtracting the 10 cases of tabes and general paralysis we are left with 36 positive results. Of these, 26 gave the ring only with undiluted fluid. I consider that if the above-mentioned precautions be adopted and a period of five minutes allowed to elapse, the appearance of a ring at the end of that time is not to be regarded as a pathological sign, provided that the ring be lost when the fluid is at all diluted. In many normal conditions a faint but distinct ring may be seen if the very best illumination be used. Very different is the ring in general paralysis, which comes at once and is very marked. This leaves only 10 cases which gave a distinctly pathological result. These cases being analysed stand as follows: One case of pituitary tumour with an enormous increase in the globulin, one case of acute mania, one case of melancholia already described as closely resembling the dementia præcox group, one case of dementia præcox, four cases of epilepsy, one case each of alcoholic excitement and congenital imbecility.

It is therefore incorrect to say that in no form of insanity except general paralysis does a sufficient increase of the protein content occur to give positive results with the butyric acid and ammonium sulphate tests.

As regards the relation between the two tests it may be noted that :

LVIII.

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(1) In no case was the Noguchi test positive without the ammonium sulphate test giving a ring with a dilution of 1 in 2 or upwards.

(2) In a number of cases the ammonium sulphate test was positive with a dilution of 1 in 2 without a corresponding Noguchi, but in dilutions above this the Noguchi reaction was always present.

Fehling Reduction.

Fehling's test was applied in the great majority of cases, and in no case was it found to be negative. The amount of glucose varied somewhat in different conditions, but not in a constant enough way to enable one to draw any definite conclusions. An accurate quantitative estimation was not made. The reaction was feeble in two cases of acute mania, two cases of dementia præcox, and three cases of general paralysis. It was exceptionally well marked in four cases of epileptic insanity, one case of alcoholic excitement, and one case of secondary dementia. In all other cases it seemed to be present in normal amount, with the exception of two cases of diabetes in which a very large quantity of glucose was noted.

After-effects.

On this important and practical point there is remarkable diversity of opinion. Thus Chauffard and Boidin had only 3 cases of vomiting in a series of 223 punctures, and no other ill-effect to speak of, with the exception of a slight headache. Nissl, on the other hand, met with pronounced symptoms in 48 out of a series of 112 cases. These symptoms were headache, nausea and vomiting, and in some cases the patient was completely prostrated; they came on from five to twelve hours after puncture. He records that seven doctors were lumbar-punctured, and severe symptoms ensued in six of them. Not more than 5 c.cm. of fluid were withdrawn.

My own results correspond with those of Nissl. I am strongly opposed to those who say that lumbar puncture is a trivial procedure which is hardly ever followed by unpleasant after-effects. Of the 120 patients who were punctured 25 suffered severely, and many others to a slighter extent. The

chief symptoms were headache, giddiness, nausea and vomiting, and in a few cases complete collapse. The patients were usually kept in bed for twenty-four hours after the puncture, sometimes for forty-eight hours, sometimes for even longer. The usual amount of fluid withdrawn was 7 or 8 c.cm. The symptoms appeared as a rule soon after getting up, and sometimes the moment the erect posture was assumed. In some cases, on the other hand, no symptoms appeared for twenty-four or forty-eight hours, and then severe headache perhaps accompanied by vomiting might make its appearance. These cases are very puzzling, and I can offer no explanation of them. In one remarkable instance the patient, being a weakly girl, was kept in bed for five days. At the end of that period she got up, and felt all right for seven hours, but then headache and faintness came on which were so severe that she had to return to bed. One patient vomited before getting up.

It is difficult to account for the different results of some observers, and I can only offer one suggestion. The one class of case who suffers no after-effect is the general paralytic, probably because of the great excess of fluid which he possesses. If the series of cases examined consist mainly of general paralytics, there will be few or no after-effects to record, whereas if the proportion of general paralytics be small the number of cases showing after-effects will be correspondingly large.

In many of these cases the symptoms seemed to be medullary in type, and a series of observations were made to determine whether the blood-pressure was affected by the withdrawal of cerebro-spinal fluid, but with negative results.

Conclusions.

(1) It has been recognised for a number of years that investigations on the cerebro-spinal fluid are of great importance in the acute microbic, and also in the syphilitic and parasymphilitic, affections of the nervous system, but the present research shows that results of considerable value are to be attained in other examples of nervous and mental disease.

(2) With regard to general paralysis and tabes dorsalis the views of other observers have been fully corroborated. An increase in the number of the lymphocytes and in the protein content is the almost invariable rule.

(3) This increase is by no means confined to these conditions, as has been commonly supposed. It has been shown that such an increase may occur in a variety of purely mental affections.

(4) A definite group of cases, bearing a strong family likeness to one another, and approximating more closely to dementia præcox than to any other recognised form of insanity, has been isolated; these cases presented a lymphocytosis which was always distinct and occasionally very marked. Query: Is it possible that these cases are in a class by themselves, and ought not to come under any of the heads in our existing classifications?

(5) The butyric acid reaction of Noguchi is characteristic of general paralysis and tabes dorsalis, but occasionally occurs in other conditions.

(6) The ammonium sulphate ring test is also characteristic of these two diseases, but is more commonly met with in other conditions than is the Noguchi reaction.

(7) The method, which has not hitherto been used, in determining the dilution of cerebro-spinal fluid with which the ammonium sulphate test is still positive, is a simple and accurate way of making a quantitative estimation of the protein content.

(8) It cannot be said that the Fehling-reducing substance shows changes characteristic of any one condition. On the whole it tends to be decreased in general paralysis and tabes.

(9) It is the rule, not the exception, for the operation of lumbar puncture to be followed by unpleasant results, especially if the patient be not kept in bed for twenty-four hours. These unpleasant results are not accompanied by any appreciable alterations in the blood-pressure.

The words of Ernesto Lugaro (12) may be quoted in conclusion: "This method of examination has already given valuable assistance in the diagnosis of doubtful cases, and at the same time it has furnished data of the highest interest. Researches of this kind cannot be too much cultivated, because they will certainly add much to our knowledge of the organic processes which form the substratum of mental diseases."

TABLE I.—*Showing the Extent to which the Cell-count varied in the same Case.*

No.	Condition.	Cell-count on different occasions.					
		1	2	3	4	5	6
1	Acute mania	5	3	—	—	—	—
2	" "	4	1	—	—	—	—
3	" "	4	5	—	—	—	—
4	" "	3	5	—	—	—	—
5	" "	7	8	—	—	—	—
6	Chronic mania	1	14	—	—	—	—
7	Paranoia	1	2	—	—	—	—
8	Congenital imbecility	19	18	—	—	—	—
9	Melancholia	103	340	120	270	—	—
10	Dementia præcox	121	85	—	—	—	—
11	" "	33	23	—	—	—	—
12	" "	31	54	26	—	—	—
13	" "	15	14	—	—	—	—
14	" "	26	22	21	—	—	—
15	Epileptic insanity	54	28	—	—	—	—
16	" "	30	20	—	—	—	—
17	" "	29	28	—	—	—	—
18	" "	84	14	23	38	—	—
19	" "	6	39	26	11	34	80
20	General paralysis	192	291	—	—	—	—
21	Tabes dorsalis	144	150	252	—	—	—

TABLE II.—*Showing the Cell-count in 119 Cases.*

Condition.	No. of cases.	Cell-counts.					
		Normal.	Pathological.				
			1-10.	10-20.	20-40.	40-100.	100-300 and over.
Tabes dorsalis	10	—	2	—	2	6	—
Tabo-paresis	1	—	—	—	—	1	—
General paralysis	12	—	—	—	2	5	5
Disseminated sclerosis	3	3	—	—	—	—	—
Cerebral tumour	3	—	—	1	—	1	1
Acute mania	13	13	—	—	—	—	—
Chronic mania	10	9	1	—	—	—	—
Melancholia	9	8	—	—	—	—	1
Epileptic insanity	15	10	—	2	3	—	—
Dementia præcox	10	—	2	4	3	1	—
Confusional insanity	3	3	—	—	—	—	—
Stuporose insanity	2	2	—	—	—	—	—
Paranoia	1	1	—	—	—	—	—
<i>Folie circulaire</i> (excited stage)	1	1	—	—	—	—	—
Alcoholic excitement	2	1	1	—	—	—	—
Congenital imbecility	13	11	1	1	—	—	—
Secondary dementia	4	4	—	—	—	—	—
Acute suppurative meningitis	1	—	—	—	—	—	1
Congenital syphilis	1	1	—	—	—	—	—
Aortic aneurysm	2	1	1	—	—	—	—
Aortic incompetence	1	1	—	—	—	—	—
Diabetes	1	1	—	—	—	—	—
Pharyngitis	1	1	—	—	—	—	—
Total	119	71	8	8	10	14	8

TABLE III.—*Showing the Extent to which the Protein Content, expressed in Terms of the Dilution of Cerebro-spinal Fluid which gave a Positive Reaction with the Ammonium Sulphate Test, varied in each Case.*

No.	Condition.	No. of times examined.	Protein content on different occasions.					
			Neg- ative result.	Undi- luted fluid.	Dilution.			
					1 in 2.	1 in 4.	1 in 5.	1 in 6.
1	Acute mania	2	—	2	—	—	—	—
2	" "	2	1	1	—	—	—	—
3	" "	2	2	—	—	—	—	—
4	" "	3	—	1	—	2	—	—
5	" "	2	—	2	—	—	—	—
6	" "	2	1	1	—	—	—	—
7	" "	2	—	2	—	—	—	—
8	Chronic mania	2	—	2	—	—	—	—
9	Congenital imbecility	2	2	—	—	—	—	—
10	" "	2	2	—	—	—	—	—
11	Melancholia	2	—	—	2	—	—	—
12	Dementia præcox	2	—	—	—	1	1	—
13	" "	2	2	—	—	—	—	—
14	" "	2	2	—	—	—	—	—
15	" "	2	—	1	1	—	—	—
16	" "	2	1	1	—	—	—	—
17	Epileptic insanity	2	1	1	—	—	—	—
18	" "	2	—	2	—	—	—	—
19	" "	2	—	1	1	—	—	—
20	" "	3	2	1	—	—	—	—
21	" "	3	—	—	3	—	—	—
22	General paralysis	2	—	—	—	—	1	1
23	" "	6	—	—	5	1	—	—
24	Secondary dementia	2	1	1	—	—	—	—

TABLE IV.—*Showing Results of the Noguchi Test.*

Condition.	No. of cases.	Positive.	Doubtful.	Negative.
Tabes	2	2	0	0
Tabo-paresis	2	2	0	0
General paralysis	7	7	0	0
Pituitary tumour	1	1	0	0
Dementia præcox	10	1	1	8
Epilepsy	15	2	2	11
Melancholia	9	0	1	8
Other conditions	54	0	0	54
Total	100	15	4	81

TABLE V.—Showing the Protein Content expressed in Terms of the Dilution of Cerebro-spinal Fluid, which gave a Positive Reaction with the Ammonium-sulphate Test.

Condition.	No. of cases.	Negative result.	Undiluted fluid.	Dilution of cerebro-spinal fluid.			
				1 in 2.	1 in 4 to 6.	1 in 7.	1 in 10 to 13.
Tabes dorsalis . . .	2	—	—	—	—	—	2
Tabo-paresis . . .	2	—	—	—	—	2	—
General paralysis . . .	6	—	—	1	2	2	1
Pituitary tumour . . .	1	—	—	—	—	—	1
Acute mania . . .	12	5	6	—	1	—	—
Chronic mania . . .	5	3	2	—	—	—	—
Melancholia . . .	5	2	2	1	—	—	—
Epilepsy . . .	14	6	4	4	—	—	—
Secondary dementia . . .	4	3	1	—	—	—	—
Dementia præcox . . .	10	7	2	—	1	—	—
Confusional insanity . . .	2	2	—	—	—	—	—
Stuporose insanity . . .	2	1	1	—	—	—	—
Paranoia . . .	1	—	1	—	—	—	—
<i>Folie circulaire</i> (excited stage) . . .	1	1	—	—	—	—	—
Alcoholic excitement . . .	2	—	1	1	—	—	—
Congenital imbecility . . .	14	10	3	1	—	—	—
Congenital syphilis . . .	1	1	—	—	—	—	—
Diabetes . . .	1	—	1	—	—	—	—
Pharyngitis . . .	1	—	1	—	—	—	—
Chronic rheumatism . . .	1	—	1	—	—	—	—
Total . . .	87	41	26	8	4	4	4

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Insanity with Myxœdema. By G. F. BARHAM, M.A., M.D.
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OUR conception of the ætiological significance of myxœdema in reference to those forms of mental disorder generally known under the name of "insanity of myxœdema," has undergone considerable modification since the time when hypothyroidism was regarded as the principal causal factor. The almost dramatic effect of thyroid treatment gave rise at first to a justifiable optimism. This for a while tended to obscure the possibility that a deeper-lying disorder of mind might exist, which would be naturally brought into prominence by the peculiar disturbance in the functioning of the brain associated with this state of disordered metabolism.

The question which requires investigation is: To what extent are the symptoms of insanity occurring in conjunction with myxœdema influenced during recovery from this latter disease under thyroid treatment? Reports of cases are frequently unsatisfactory, from the fact that with the true or apparent recovery the patient is lost sight of, and we are left in ignorance as to the subsequent state of mind. With the return to a sane reaction, after an attack of most of the recoverable insanities, we are usually content, though often unconvinced, in the employment of the word "recovery." On the other hand, it is often held that the insanity which accompanies myxœdema is in a category by itself, in that it is eminently curable. It is certainly true that we are in possession of a specific remedy, by means of which we may to a considerable extent control the disease processes of myxœdema, including certain phenomena of a disordered cerebration. My present object, however, is to call attention to the fact that in certain of these cases the psychical symptoms do not clear up with the disappearance of the physical disease, and incidentally to raise the whole question of prognosis in regard to the mental aspect of insanity occurring with myxœdema.

Since Sir William Gull (1873) described the mental and physical symptoms of myxœdema numerous cases have been recorded. The eight cases described by Sir Thomas Clouston (*Mental Diseases*, 1904) do not conform to any uniform mental

condition; yet in 1904 he observed in reference to these cases—"The ætiology is here so definite." Paton, in his *Text-book on Psychiatry* (1905), doubted whether the great variety of mental symptoms met with in association with myxœdema, and formerly regarded as specific of this disease, could really be attributed to this cause. Pilcz thought that the mental phenomena might in some cases be dependent upon the myxœdema, but he was also of the opinion that, in other cases, the mental symptoms might be the expression of a complicating psychosis. It is, indeed, uncommon in an asylum to meet with a case showing only the apathy and the volitional and memory defects characteristic of simple myxœdema. More commonly there are insane ideas, hallucinations, or other phenomena indicating a more complicated disease process.

Tanzi regarded this distinction as superfluous, except from the symptomatological point of view. In his text-book of mental diseases he does not appear to admit the possibility that a psychosis, having an independent origin of a purely psychic nature, may complicate myxœdema. While he acknowledges the great variety of the mental phenomena which are met with in insanity associated with the imperfect functioning of the thyroid and parathyroid glands, he nevertheless insists that these abnormal mental states, described by him as the "thyroid psychoses," have their *sole* origin in lesions of these organs. On the other hand, Berkley and others have commented on the great variations in the types of alienation which may complicate myxœdema. And Bianchi, in his text-book, has not described any specific form of insanity with myxœdema.

At the present time we may differentiate between, on the one hand, certain mental symptoms accompanying myxœdema, all of which are characteristic of the general slowness and difficulty in reaction associated with states of athyroidism, hypothyroidism, and cretinism; and, on the other hand, definite types of mental disorder associated with myxœdema. The former of these is the "myxœdematous insanity" of Kraepelin. The latter are often examples of manic-depressive insanity, or dementia præcox, or they may show the mechanisms of dissociation, defence, or other abnormal process underlying hysteria and the psychoneuroses.

As an example of this latter type of case I will proceed to give the history of a case recently discharged from this asylum.

This patient, N. M—, was a married woman, æt. 34. She was the survivor of twins (the other having died at birth). She was well educated and showed some refinement in her tastes. In disposition she was bright and intelligent. There were several instances of insanity in her family :

- (a) Paternal grandfather.
- (b) Father (recurrent insanity).
- (c) A brother (dementia præcox).

She had been married eleven years, during which time there were eight children. In the third pregnancy there were twins, so that in the first three years she produced four children. Following this third confinement symptoms of myxœdema developed. There was marked debility: the face was puffy, and speech was slow and thick ; there was marked apathy and an inability to think and remember. She suffered from terrifying dreams and visions—for example, of her own funeral. Thyroid treatment is stated not to have been well tolerated, but she ultimately made a fair recovery.

After the four succeeding confinements (*i.e.*, in the succeeding eight years), there was always considerable prostration and debility, but no definite signs of myxœdema appear to have recurred. At these times she suffered from severe pains in her head, insomnia, and loss of appetite. The only nutriment tolerated was a mixture of beef-juice and brandy, and unfortunately this diet led to the habit of spirit-drinking.

The first symptoms of mental disorder appeared during these latter years in the form of a wholly unreasoning jealousy regarding her husband and one of his shop assistants. In order to dispel her morbid suspicions he changed his female assistant for a male. This, however, did not improve matters, because the patient carried on an extravagant flirtation with this man ; and, especially under the influence of alcohol, she appeared to take a vicious pleasure in causing her husband annoyance.

Six months after the last confinement these tendencies became so marked that removal to the infirmary was necessary. The leading symptoms at this time were a somewhat acute confusional state of mind with auditory and visual hallucinations. There was subsequently complete amnesia for this period of her removal from home and her transference to the asylum.

On admission she still showed considerable confusion of ideas and memory, and there were ill-defined hallucinations; she appeared to hear voices, talked vaguely about seeing rats on the walls, and thought she was gnawed at night by these animals. The reaction was particularly slow, she was dull and apathetic, and was unable to give any account of herself. Memory was impaired, and she was disorientated.

Physically she was in poor health. The skin was yellowish-brown and unhealthy, the extremities cold and pale, the pulse weak and irregular, but normal in rate. There was no organic disease of any organ. The reflexes were normal, and sensation showed no impairment beyond the general sluggishness which characterised all her reactions. The palate showed a curve of degeneracy. She was remarkably slow and anergic in all her movements. There was at this time, however, no abnormality of speech. After a few weeks there was some general improvement in health. Memory improved and she came to realise where she was.

She continued to show the same apathy and lack of interest in herself and her affairs. There was no indication of insight into the circumstances of her position. She was not disposed to employ herself but appeared infinitely bored by everything. For eighteen months she continued in this dreamy state of mind, chiefly characterised by a markedly inefficient grasp of reality. Her doctor was the only person who appeared to interest her, and towards him she was alternately critical, irritable, or amorously impulsive. This subsequently proved to be a result of mistaken identity, as will be shown later.

During eight months there was amenorrhœa, and she was under the delusion that she was pregnant. Curiously at this time the breasts became active, but there were no other symptoms to give rise to this delusion.

Finally there appeared definite signs of myxœdema. The features became puffy and expressionless, and particularly the mouth and *alæ nasi* were uniformly enlarged: there was also the characteristic raising and arching of the eyebrows. The skin was increasingly icteroid in colour, and there was a well-defined dull pink flush on either cheek. There was a general, though slight, appearance of solid œdema, and speech was slow and thick.

She was then put on thyroid treatment and became com-

pletely restored to physical health in the course of four weeks. Mentally, also, she was bright and intelligent and appeared convalescent.

She now, for the first time, gave a good history of her life. This was amplified from other sources.

Analysis of this history and of the symptoms of the psychosis showed the following conditions :

(1) That a year prior to her marriage she was engaged to be married to a cousin, to whom, it appeared, she was deeply attached. The discovery that he was already the father of an illegitimate child caused her to break off her engagement. She was greatly upset at this affair, but endeavoured to forget the painful memory. The subsequent history shows, however, that this former affection remained in a state of repression, and that it continued to exert an indirect influence on her mind.

(2) That she had never felt any real affection for her husband. He was fifteen years her senior, and socially her inferior, and she married him from necessity rather than from choice. She always prided herself on her family and education, and said that her husband never understood her and that she always felt that she had lowered herself by her marriage. The husband, who was a somewhat coarse individual, appeared to be genuinely fond of his wife.

(3) That married life had been a continual conflict, in which all the natural trends of the personality were opposed to the circumstances under which she was compelled to live. Associated with this was another conflict, more or less submerged, in which the repressed affection for her cousin stood in contrast to her feelings regarding her husband. The life of this patient was, therefore, deeply influenced by certain incompatible emotional factors at conflict with one another. As these incompatible complexes obviously could not all obtain realisation, it was necessary that one or more of them should undergo repression. I therefore assume that the influence of reason led this patient to strive to ignore the painful factors in this conflict, and to adapt herself to the dominating circumstances of her life ; but that when, in her repeated states of debility, and, more especially, under the influence of alcohol, the restraining influence of reason diminished, and the facts of reality appeared less formidable, the formerly repressed complex rose to the surface. In particular we find the repressed

wish for release from her husband striving to attain fulfilment. Now in hysterical psychoses, as is well known, a repressed desire frequently appears on the surface of consciousness as its exact opposite, namely fear; in the present case the secret desire that her husband would leave her was expressed in consciousness as the fear that he was leaving her. Hence this unreasoning jealousy.

These recurring exhibitions of morbid jealousy may, therefore, be interpreted as the first phase of a mental disorder arising on the basis of an abnormally directed conflict, and influenced by alcohol and physical debility.

At the onset of the actual psychosis, the symptoms were those of the confusional hallucinatory type commonly associated with alcohol; but this acute phase soon passed into a state exhibiting entirely other characters. In this later stage she was in a partially dissociated dream state. While recognising her own personality and realising where she was, she was quite unable to explain her presence in an asylum. Her former life and her husband appeared to be entirely ignored. On the other hand she mistook the identity of the doctor and believed he was her cousin to whom she had been formerly engaged. She believed, moreover, that she was pregnant as the result of this affection.

This period of the disorder may be interpreted as another phase of the conflict. In this state of partial dissociation we find the formerly repressed complex of her early affection occupying the field of consciousness, and thus attaining a delusional fulfilment. This phase may therefore be regarded as a refuge from the conflict, and in its mechanism it shows the attainment of a wish fulfilment. Now underlying the mental reaction of this second phase there were certain characters suggestive of hypothyroidism, namely continued apathy with diminution of volition and slowness of thought and action. When, moreover, these symptoms became pronounced, the result of thyroid treatment entirely confirmed the diagnosis. It may be suggested, therefore, that as a result of the lowering influence of this state of disordered metabolism, including a disorder in the functioning of the brain, there occurred a correlated diminution in the higher controlling functions of the mind, removing the resistance normally exerted against desires which were incompatible with reality.

As regards the effect of thyroid treatment on the mental state; with recovery of health the mind returned to its former conditions, and with the improvement which had occurred under thyroid treatment the patient was taken home by her husband. The apparent mental recovery, however, in reality merely brought about a renewal of the former conflict, and this conflict, moreover, underwent a further development.

The investigation of the facts concerning her history, and her confession of the unhappy state of her life, re-introduced prominently into consciousness the incompatible emotional factors which had existed. On returning to home life these incompatible desires had again to be subjected to repression.

After leaving the asylum she continued thyroid treatment under medical supervision, and, seen at the end of a month, she was free from any sign of myxœdema. Her husband said, however, that she was again behaving in a very annoying manner, and was again showing unfounded jealousy about him.

During this time the patient had behaved in a very strange and emotional way towards the doctor, had written several letters of a distinctly intimate nature, and finally openly expressed her affection, and her scheme for getting her husband married to his housekeeper, thus opening the way to a legal separation and her own liberty.

Subsequent letters showed very definitely evidence of a hypomaniacal disorder of mind. She was extravagantly jocular, quite wanting in any grasp of reality, and she was absurdly happy in a sort of imaginary re-arrangement of the incompatible factors in her experience.

These latter symptoms occurred in the absence of any evidence of hypothyroidism, as well as in the absence of alcohol, which she had refrained from taking in order to show her devotion to the orders of the doctor on whom she had now cast her affections.

The ætiological factors in this case are: (1) The emotional conflict; (2) alcohol; (3) myxœdema; (4) insane heredity.

The emotional conflict, which had taken an abnormal direction, is found underlying the whole course of this disorder in the mental life of the patient.

To the elements of this conflict was due the conformation of the clinical picture; the symptoms were present at times in

which there were no signs of the influence of either alcohol or hypothyroidism.

The progress of the case, however, was considerably influenced by the state of the health as conditioned by these two important contributory factors.

The one essential factor, without which the development of a state of insanity was improbable, was the psychic factor, *i.e.*, the abnormally directed emotional conflict.

It is true that under thyroid treatment the mental condition improved sufficiently to enable her to remain outside an asylum. The continued abnormal mental state, however, was an indication of the independent progress of the psychosis.

This case, therefore, will support the opinion that the prognosis of insanity with myxœdema is not so favourable as has been frequently thought to be the case; and that even when the mental symptoms appear to clear up under thyroid treatment, it would be advisable in all cases showing evidence of a complicating psychosis to hold a very guarded opinion respecting the future.

It is not my object to draw any general conclusions from the study of an isolated case, but rather to emphasise the importance of the recognition of the psychic origin of these morbid mental states associated with myxœdema. Unhappily, those psychic factors, occurring in the evolution of the mental life of the individual, the tendency of which is to take an abnormal direction, and which directly develop into the abnormal or insane phase, usually, on recovery, remain undischarged, and continue as the potential factors of insanity. Thus the personality is weakened and becomes a prey to every contributory factor, by which its resistance is liable to become lowered. It is generally allowed that alcohol is such a contributory factor in the causation of many forms of insanity. May it not be said, with equal truth, that disordered thyroid metabolism has in all probability a similar relationship in its association with the ætiology of the psychoses?

DISCUSSION,

At the Quarterly Meeting held at Long Grove Asylum on February 22nd, 1912.

Mr. A. O. GOODRICH remarked that he understood drink was put down by the author as a factor in the causation of this case. He would like to know whether it was a cause of the insanity, or whether the insanity was the cause of the patient taking to drink.

Dr. J. R. LORD said Dr. Stansfield asked him to express his regret that, owing to an attack of rheumatism, he could not be present. Dr. Stansfield had sent notes of a case of myxœdema, which he thought might prove of interest in relation to Dr. Barham's paper.

"*Notes by Dr. T. E. K. Stansfield* :—Patient, H. H—, married in 1879 at the age of 20; first child born in 1880; second child born in 1882; third child born in 1887; fourth child born in 1888. My recollection of the case was that, following the birth of the second child, there appears to have been some lactational melancholia, with attempted cut-throat. Details of this could not be obtained at the time, but it was assumed that the thyroid had suffered injury. Symptoms of myxœdema were first noticed when she was pregnant with her fourth child, the principal mental symptoms being increasing mental confusion, inability to concentrate or employ herself, with considerable insight into her mental state with resultant depression. She was under treatment by Sir William Broadbent for about a year in 1890–91, phosphorus being given extensively. She was afterwards seen in consultation by Dr. Mitchell Bruce, who also confirmed the diagnosis of myxœdema. The prognosis at that time with regard to life was very bad; the patient now says that the duration of her life was considered then to be worth a few months. The mental symptoms became more pronounced, and she was certified in 1891 and sent to an asylum. The ordinary mental symptoms associated with myxœdema were considerably masked by the symptoms, which it was afterwards considered might possibly be due to the prolonged treatment with phosphorus. To the ordinary symptoms, dulness, hebetude, and vacant automatism, were added those of erotomania; she got into other patients' beds, and when being bathed, unless the nurses were very careful, she would seize and almost strangle them in the excess of her sexual desire. She gradually became worse during the first eleven and a half months of her stay in the asylum; it was then decided that she should be treated with the injection of glycerine extract of the thyroid of the sheep, which had been suggested by Dr. George Murray, of Newcastle. The Committee very kindly purchased the sheep specially for the purpose, and these as required were killed, and I dissected out the thyroid and made a 20 *per cent.* glycerine extract by pounding the gland in glycerine and macerating for forty-eight hours, afterwards straining through several layers of very fine muslin. The patient was given $\frac{mxx}{xxx}$ hypodermically every second day. The reaction was most remarkable, so much so that in ten weeks' time she was sent out on trial, and at the expiration of her trial period she was discharged recovered. I informed the husband at the time of her discharge that it would be necessary for him to keep a very close watch for the earliest symptoms of relapse, when the thyroid would have to be again administered. My recollection is that about four months after her discharge, or five months after the last injection, the symptoms began to recur, when I instructed them to obtain the gland from the butcher, and give it to the patient in daily small doses in the raw state, either in port wine or along with a mouthful of soup. This method of treatment was carried out until the advent of the thyroid tabloid, which was then substituted in 5-gr. daily doses. Within three years of her discharge from the asylum she made two tours in the United States. There she had considerable difficulty in obtaining the tabloids, which had to be cabled for to England. Her weight began then to steadily increase, and she gained over 3 st., though her general health was excellent, and she continued to gain weight after her return. After another interval of about three years she again became pregnant, and she was prematurely confined of a non-viable child, probably of about six months from the description given. Following this she had mild psychasthenia for two years, from which she recovered without any special treatment. Since that time, now twelve years ago, she has had very excellent health, and she is physically and mentally very well indeed at the present time, thanks to her daily 5-gr. tabloid of thyroid extract. The probabilities are that the increase in weight in America was due to thyroid insufficiency. I described the case before the Pathological Section of the British Medical Association which met at Nottingham in 1892."

Dr. LORD, in discussing Dr. Barham's case, said it was a very interesting and well-recorded case of this disease. His experience agreed with that which Dr. Barham gave, namely, that these cases in asylum practice were not always of the favourable character which the general literature on the subject led one to suppose.

Probably this was due to the fact that they often came under treatment at quite a late stage, when the poisoning due to thyroid insufficiency had materially changed the general chemistry of the body. In his own cases, almost invariably, there had been associated with it much general arterio-sclerosis, and also there had been often considerable alcoholism as a secondary factor. With regard to the symptomatology of the condition, not all had the ability or the opportunity to enter into a psycho-analysis of the character which the meeting had had the pleasure of listening to from Dr. Barham. If he were to insist upon that analysis in all his admissions, he would have to ask his Committee to give him as many medical officers as there were patients. In his experience, the symptoms were chiefly those of slight confusion, much retardation and poverty of thought, considerable loss of memory, associated with hallucinations of hearing, morbid suspicions, and delusions of persecution allied to disorders of organic and tactile sensibility. Treatment with thyroid, although it did much good, did not always produce such favourable results as the profession were led to expect. Of course in some of his cases the results had been very good, but that was not the rule.

Dr. EDEN PAUL desired to insist on one point a little more than Dr. Lord had. He thought the symptoms of hypothyroidism were now so well known to the general practitioner that the majority of cases of hypothyroidism and myxœdema came under the notice only of the general practitioner, and did not get as far as the psychologist. They were treated by thyroid in quite an early stage, before mental symptoms had developed. Those were the cases which justified the favourable statements as to the outlook when thyroid treatment was carried out. The very fact that a case of myxœdema with severe mental symptoms came under the notice of the asylum medical officer at the present day largely implied that there was a multiple causation, and that it was a case in which thyroid treatment by the general practitioner had failed to prevent the onset of mental symptoms. In those cases there was another element, as had been so graphically described in the case related in Dr. Barham's short paper. That paper showed that if there were a multiple causation, mere removal of one element would not successfully cure the disease.

Dr. BARHAM, in reply to Mr. Goodrich, said he felt that the drink habit was undoubtedly the result of the disordered conditions in the patient's mind as the result of the conflict. She could not adapt herself to conditions, and she felt the need of some sort of refuge. He could not say there was a predisposition to drink. In her family there was a reference which he did not think sufficiently authentic to be made use of in the paper, namely, that her brother was addicted to alcohol. When once the drink habit was started a vicious circle was set up. He had listened with great interest to the case of which Dr. Stansfield had kindly sent particulars. He had not himself seen arterio-sclerosis in connection with thyroid cases which had been in the asylum; the subjects here were all young people. There had been three women in the asylum who had suffered from that disease. He quite agreed with Dr. Eden Paul that these cases were usually of a complicated type. Of the three cases, he had fully investigated only one. Of the other two, one was also a complicated case, but her mental symptoms were so acute that they did not permit of investigation. It was of great interest to him to note a fact which was classical with regard to the occurrence of myxœdema, namely, its association with a very rapid succession of births. This woman, who died uninfluenced by any thyroid treatment, produced four children in one year: she had one child, and before the expiry of another twelve months she gave birth to triplets. The other case which was in the asylum was recently discharged recovered; hers was a perfectly simple uncomplicated case of the type which Kraepelin described as myxœdematous insanity, namely, with volitional and memory defect.

A Case of Double Personality.⁽¹⁾ By BERNARD HART,
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DOUBLE personality is a fascinating subject, and has always possessed a peculiar attraction both for the professional psychologist and the layman—owing, no doubt, to the strange and often dramatic character of its manifestations.

It is hoped, therefore, that a few notes upon an actual case may be of interest. These notes relate to a case belonging to the group of the psychoneuroses, a case of considerable complexity, and one which was subjected to a prolonged psychological investigation. The episodes connected with the double personality form, indeed, only a single chapter in a long history.

I shall only attempt to relate as much of the other portions of this history as is necessary for the understanding of the chapter in question. This chapter is of exceptional interest in that I was able to witness both the birth and—I believe—the final disappearance of the secondary personality.

The patient, whom we will call John Smith, a clerk in a business house, æt. 28, was admitted to the asylum with a certificate stating little beyond the fact that he had sent threatening telegrams to various people, and had occasionally been observed to behave in a somewhat irresponsible manner.

He was clear, collected, and to a cursory examination presented little that was abnormal. He stated that he had been assured by his wife that he had sent the telegrams, and that it might perhaps be true, but that he himself had no recollection whatever of doing so.

A careful examination showed, however, that the sending of the telegrams formed only a single episode in a whole section of his past life, ranging over several weeks, the contents of which were entirely forgotten. Moreover, it was found that chequered throughout the preceding few years there were other similar totally forgotten periods. He would remember, for example, starting for the office one morning—then would come a blank—and, perhaps a week later, he would “wake up,” as it

were, to find himself in some infirmary, with no recollection of how he got there, or of anything that had happened during the preceding week. On these occasions he would be informed that he had been found by the police wandering aimlessly about, or that his relatives had discovered him in some lodging-house far from his home.

During one of these periods he sent the telegrams, and during each he behaved in the irresponsible manner mentioned in the certificate.

A history of this kind at once suggests the existence of hysterical amnesias or "fugues"—phenomena which have been familiar to us since they were fully described and investigated by the French psychologists of last century. This diagnosis was confirmed by the complete analysis of the case subsequently made.

Now it is well known that in these hysterical cases the lost memories belonging to the forgotten periods are frequently recoverable by hypnosis. This procedure was therefore employed in the present instance, and with a successful result. Hypnosis was induced without much difficulty, and the patient was then able to recount all the previously forgotten events which had occurred during each "fugue" period, and to give a detailed account of his wanderings. By this means all the blanks in the patient's history were finally filled up.

So much for the history preceding the chapter in which the secondary personality appeared. Before passing on to that chapter I may be permitted to make a few remarks concerning certain theories which were employed in the investigation of the case.

The view is now becoming widely accepted that hysterical amnesias and other symptoms belonging to the same group are a result of psychical conflict, the existence in the mind of elements which conflict with the trend of the mind as a whole. In consequence of this conflict the elements in question have been subjected to the process known as "repression"; that is to say, they have been buried, as it were, and put out of gear with the rest of consciousness.

This theory was acted upon in our present case, and a prolonged investigation was made to ascertain whether such buried elements existed. The analysis was successful, and a complicated and interconnected system of conflicts was found, which

satisfactorily explained the symptoms observed. To detail their nature would take us far beyond the limits of the present communication—and, moreover, such a procedure is not in the least necessary for the purpose we have in hand. All that concerns us here is what happened during the process of resuscitating these buried elements.

It must be remembered, by the way, that the elements in question lay at a deeper level than the memories recovered by hypnosis. The latter were merely memories of events which happened during the amnesic periods—for example, that the patient wandered from such a place to such a place—whereas the buried elements which it was now sought to discover furnished the forces responsible for these wanderings—that is to say, they explained why the patient behaved in this extraordinary manner.

It has been pointed out that these elements are *repressed*, and hence that there is a resistance to their being resuscitated. They are intrinsically unpleasant to the mind ; the mind refuses to think of them, and adopts every method possible to avoid thinking of them.

Now it was during this process of resuscitation that the secondary personality made its first appearance.

The circumstances of this first appearance were as follows : The patient had just been visited by an uncle, whom he professed greatly to dislike. The explanation of this dislike lay, by the way, in the fact that the uncle was closely connected with some of the buried memories whose existence has been mentioned. After the visit was over I interviewed the patient. He seemed slightly confused and constrained. I began to question him concerning the causes of his aversion to his uncle. The patient's demeanour, hitherto always very courteous, rapidly began to change. Finally he burst into a rage, and when I mentioned events which he had himself told me on former occasions, vowed that his uncle must have been tattling, as he had certainly never told me anything of the sort. He then maintained that he had only seen me on one occasion before, and laughed contemptuously when I pointed out that we had already had at least twenty prolonged interviews. When I mentioned further events of his past life formerly elicited from him, he asked me what on earth I meant, and suggested that I must be mad, and that a bicycle ride in the country would

probably cool my heated brain and bring me to my senses. Then he suddenly sat down, complained of headache, and in a few seconds returned to his usual condition, with a complete amnesia for everything that had occurred since the visit of his uncle.

After this occasion the new personality frequently appeared. In order to distinguish it from the personality usually present I christened it "the one-fifth man." The name originated from a conversation with the patient in which I tried to explain his condition by saying that he was like a man who never appeared as a whole—but that sometimes four-fifths of him occupied the stage, sometimes a chipped-off piece, comprising the remaining one-fifth.

The "one-fifth man" underwent a rapid development, and was subsequently a much more complicated person than on the occasion of his first appearance.

He was always suspicious and hostile, with an unconcealed aversion to myself. He was, moreover, always absolutely ignorant of the buried memories which had been elicited in former stages of the analysis, and of the fact that he had ever submitted himself to hypnosis, and always became angrily incredulous when any of these subjects were touched upon.

On the first occasion he had no idea where he was, did not know how he got here, and remembered nothing of the events of the preceding few months. Later, however, as the secondary personality developed he acquired knowledge of all these things, and was able in this state to go about his ordinary work in the asylum without arousing any suspicion in those who were not intimately acquainted with him.

The hostile attitude towards myself persisted unabated throughout his entire career. The ordinary personality, on the other hand, was very friendly to me, and very grateful for the time I devoted to his case.

On the day following the first appearance of the one-fifth man I again endeavoured to question the patient concerning the causes of his aversion to his uncle. He again became very agitated, and in a few moments the "one-fifth man" was once more on the scene, with all the same characters present as on the preceding day. He remembered perfectly everything that had happened during his previous appearance, but nothing else.

This localised memory was always observed when the one-

fifth man was present ; he remembered all his former appearances, but nothing that had happened while the four-fifths personality was in possession of the field. *Per contra*, the four-fifths personality remembered nothing that happened while the one-fifth man was in command.

There is one point which will immediately strike us. On both the occasions described the "one-fifth man" had appeared so soon as the patient was questioned concerning his aversion to the uncle. Now further experience showed that the one-fifth man was always produced by an occasion of this character ; he always appeared whenever a "sore spot" was touched—that is, whenever there was a danger of one of the buried memories or conflicts being brought to the surface. It will be seen later that this point is of fundamental importance to our understanding of the genesis of the second personality.

On an occasion a few days later, when the one-fifth man was again on the scene and abusing me with his customary vigour and directness, I persuaded him to commit some of his statements to writing. He produced the following document :

"(1) I refuse to accept Dr. Hart's statements referring to numerous lapses of memory. None have ever occurred. (2) Positive of the fact that the number of visits to the doctor has not exceeded three. (3) Dr. Hart forced certain remarks upon me and I told him he was off-colour and bilious, and advised him to take a cycle ride. (4) He suggested that I had made a bedroom of his sitting-room, and I refused to accept this statement also.

"(Signed)

"JOHN SMITH."

The last remark concerning "making a bedroom of his sitting-room" referred, of course, to my statement that he had been frequently hypnotised.

Subsequently the one-fifth man began to write letters to me. They were invariably hostile and abusive in tone. The four-fifths personality had no knowledge of these effusions, and was always grieved and distressed when I showed them to him.

A single example of these letters, selected from a large number, is reproduced here. This particular one is especially interesting, partly on account of the insulting but delightfully humorous postscript which concludes it, partly because I subsequently showed it to the four-fifths personality, and he wrote an indignant repudiation of it on the same sheet. This double

communication, therefore, excellently illustrates the opposing characters of the two personalities.

"SIR,—I beg to inform you that our acquaintance must close. It will be best to have no communication with each other in the future. I have determined not to speak to you again.

"I am,

"Yours truly,

"JOHN SMITH."

"P.S.—Things that are equal to the same thing are equal to one another, *i.e.*, as people here are *too stupid* to recognise *your stupidity* you remain here, and you yourself must recognise this. It is fitting that you should have the tender care of imbeciles. Sane people would not tolerate you."

This production was subsequently shown to the four-fifths personality, and the latter promptly wrote the following remarks on the back of the same sheet :

"During the whole of my interviews with Dr. Hart my attitude has always been one of extreme cordiality, and this has lasted for the past two months. The rubbish written on the previous page is obviously untrue, and betrays many ideas unworthy of my real self.

"JOHN SMITH."

The animosity of the one-fifth man to me was so marked, and his demeanour occasionally so threatening, that it became advisable to have some means of controlling him. I accomplished this by the employment of post-hypnotic suggestion. The patient was hypnotised when in his relatively normal state, and it was suggested to him that if the one-fifth man were ever on the scene, the ordinary personality would immediately reappear if I showed the patient a certain small metal object. This suggestion was always successful, and I could subsequently produce either of the two personalities at will—the one-fifth man by deliberately touching upon one of the "sore spots," the four-fifths state by utilising the previously given post-hypnotic suggestion.

Now a few words as to the explanation of the genesis of the one-fifth man.

This secondary personality was not in any way identical with the fugues which had been present prior to the patient's admission. On the contrary, during the second state he had no memory whatever of the events which had occurred during the fugues, and was contemptuously incredulous when I mentioned their existence.

The birth of the one-fifth man was entirely due to the psychological investigation to which the patient was being subjected at this time. The one-fifth man may be regarded, indeed, as a kind of psychological artefact.

It has been pointed out that the investigation consisted in the bringing to the surface of certain buried memories and conflicts, and that to this process of resuscitation a resistance was always opposed ; that is to say, the mind refused as far as possible to allow the mental elements in question to make their appearance in the field of consciousness. Everyone will be acquainted with minor examples of this method of avoiding the unpleasant things in life by deliberately ignoring their existence.

Now the one-fifth man may be regarded as a kind of crystallisation of this resistance, his essence consisted in an elaborate and very efficient defence against the process of investigation which I was carrying out.

He had an intense animosity to me, and endeavoured to belittle me in every way. He strove to cast scorn upon my intelligence and my methods, and hence to destroy the importance and genuineness of the buried memories which my methods were eliciting. He was blankly ignorant of all these buried memories, and by no process of persuasion could be got to acknowledge their existence or import. Generally, indeed, the whole of the period during which he held the stage was occupied in unremitting abuse of myself. One could not help being reminded of the story of the defending barrister, whose brief was marked by the solicitor, "No case—abuse the plaintiff."

It will now be clear why the one-fifth man always appeared whenever the investigation was getting dangerously near one of the buried memories. He represented a concentrated resistance to the resuscitation of the elements in question, and so long as he was present it was, indeed, absolutely impossible to proceed with the analysis. Only by the exercise of considerable circumspection in the approaching of the "sore spots," and by the method of control already mentioned, could any progress be made.

As the analysis reached a more advanced stage, however, and the buried memories were brought to the surface one by one, the one-fifth man diminished in potency and virulence, until

finally, when the analysis was sufficiently complete, and the majority of the repressed elements had been recovered, he altogether disappeared from the scene.

The analysis of the case as a whole does not enter into the limited sphere with which my communication is alone concerned. I have, indeed, deliberately refrained from mentioning the content of any of the repressed elements or conflicts, in order not to confuse the real significance of the secondary personality. I may say, however, that the analysis was brought to a successful conclusion, and the patient has been for some time in a normal condition.

(1) Read at the Quarterly Meeting of the Medico-Psychological Association, Long Grove Asylum, February 22nd, 1912.

Aphasia in General Paralysis and the Conditions associated with it. By EDWARD MAPOTHER, M.D.Lond., F.R.C.S.Eng., Assistant Medical Officer, Long Grove Asylum.

CERTAIN features of the speech defects commonly seen in general paralysis bear a resemblance to aphasia, *e.g.*, inability to find required words, and the tendency to omit syllables or words without noticing it, or to transpose syllables or the vowels of successive words. More definite aphasia, however, may occur in general paralysis either as a transitory or lasting symptom. Though it may arise under a variety of conditions it is distinctly uncommon.

This paper is based on the clinical observation and *post-mortem* findings in cases of general paralysis at Long Grove Asylum. Among the subjects of the first 973 *post-mortem* examinations after the opening of Long Grove Asylum there were 273 general paralytics; 226 cases of the disease among 633 *post-mortems* on male patients, and 47 cases among 340 on females.

Aphasia may co-exist with general paralysis as a purely accidental concomitant, *e.g.*, as the result of trauma or of embolism from valvular disease. An instance of the former association of conditions is mentioned in a recent paper by MacFie Campbell (1).

Apart from such coincidences, aphasia may occur in general paralysis ; (1) as a purely functional condition without demonstrable *post-mortem* lesion ; (2) as a result of special localised intensity of the ordinary morbid process constituting general paralysis ; (3) from subdural hæmorrhage ; and (4) from focal lesions caused by arterial disease associated with general paralysis.

Aphasia is most often seen in general paralysis as a purely functional condition. It may occur thus as an isolated phenomenon or associated with right hemiplegia. Consciousness may be lost at the onset or preserved throughout. The aphasia may be of motor or sensory type—more commonly the former. Such attacks are fairly common, frequently occur early in the disease, and may even be the first symptoms noted. They have long been recognised, the first reference to them which I have been able to find being contained in a paper of Dr. Clouston, dated 1875, reporting two cases, both of the motor type (2).

The following is a typical instance of this condition :

R. P—, male, æt. 24. Syphilis denied. No physical evidence of the disease, congenital or acquired. History of somewhat severe head injury six months previously, and of an attack seven days before admission, in which speech was entirely lost and right side paralysed.

On admission the patient was dull and disorientated. Speech was drawling and slurred. Slight tremors and ataxy present ; tendon jerks exaggerated. Pupils were then equal, regular, and reacted well to light and accommodation. Later both became irregular and sluggish and left larger than right.

Blood-serum exhibited positive Wassermann reaction, and cerebro-spinal fluid positive reaction to Wassermann test and lymphocytosis.

He had a series of aphasic attacks, with some confusion, but no definite loss of consciousness and no motor defect.

In these he could understand some simple orders, but tended to repeat the same action in response to successive commands. Gave his name correctly, but all other utterances, spontaneously or in response to questions, showed marked paraphasia, of which he seemed unaware. Could not repeat words nor read nor write. Could not name objects, but could pick out the one named from a collection of objects.

The condition seemed to be a moderate degree of auditory aphasia.

Mercury and potassium iodide in large doses were tried without effect.

Post-mortem.—Pia was slightly thickened, adherent all over hemispheres. Granularity of ventricles. No marked change in main vessels; no focal lesion.

In such cases the aphasia generally disappears after a period lasting from a few minutes to a few days. In rare cases, however, lasting aphasia may develop in general paralysis, and even careful microscopic examination after death may fail to reveal a corresponding lesion. The same is true of other symptoms, suggesting a focal lesion such as hemiplegia.

In the following case no such lesion was present on naked-eye examination:

H. G—, male, æt. 41. No history of syphilis. Scar in groin. Scar on left leg, suggestive of syphilitic ulceration.

On admission he was fatuous and happy. There was general enfeeblement, with clumsiness and ataxy. Tendon-jerks were much exaggerated. Pupils were equal but irregular, reacted well on convergence, not at all to light.

He understood and readily obeyed all orders. He could read and write, and kept in his pocket a piece of paper with his name written on it to show when asked. Almost the only words he ever uttered in response to questions or spontaneously were "Bits and bits."

This condition, apparently one of motor aphasia, lasted till death. He had a number of right-sided fits without loss of consciousness, followed by transitory right hemiplegia. He finally died after a similar attack.

Post mortem.—Brain showed changes of advanced general paralysis. Vessels were in good condition, and no focal lesion of any kind was found.

The second condition in general paralysis which may give rise to aphasia is a localised intensity of the processes in the cortex and pia-mater characteristic of the disease. Such cases have been mainly described by French authors (3), (4), (5). The aphasia in the cases reported has generally been permanent after a sudden onset. In some cases, *e.g.*, one described by Hanot in 1875 (6), there have been prodromal transitory attacks of the same type of aphasia, such resembling the

aphasic seizures noted above. In a case described by Serieux and Mignot, hallucinations of hearing alternated with attacks of auditory aphasia.

Aphasia may also occur in general paralysis as a result of subdural hæmorrhage. This is now a rare complication of the disease and becoming rarer. Trauma is probably a factor in its production. Dr. Mott has pointed out that the decline in its frequency in general paralytics has coincided with that of fractured ribs and hæmatoma auris in the same patients. Also that it is much more frequent in male than female general paralytics, the former being more restless. The latter fact is exemplified by our experience here. No example of the condition has been met with in a female general paralytic.

Subdural hæmorrhage seems to be found with about equal frequency in conjunction with cerebral arterio-sclerosis of the senile type and with general paralysis. In our first 973 *post-mortems* it was associated with senile arteriosclerosis six times, with general paralysis five times, and once it was found in a patient who had suffered from paralysis agitans.

Where, however, it occurs with general paralysis, marked degeneration of the main cerebral vessels may or may not be present. Such was present in two of our five cases, absent in three.

One of the general paralytics in whom subdural hæmorrhage was found *post mortem* exhibited aphasia during life.

The following is a brief abstract of this case :

S. H—, male, æt. 63. Syphilis denied. Pigmented scars on both legs. History of lightning pains.

On admission he was disorientated and apathetic. There was general feebleness and general blunting of sensation. There were general tremors, especially in voluntary movement, and constant athetoid movements of the left hand. Right knee-jerk absent, left very sluggish. Extensor response both sides. Pupils very sluggish to light, reacted well on convergence.

The articulation was typical of general paralysis. His comprehension of words was very defective ; he misunderstood much that was said to him. He occasionally used wrong words and frequently had great difficulty in expressing himself, needing to revive numerous associations before he could find a word.

He had a seizure ten days before death, after which he never regained consciousness.

Post mortem there were well-marked signs of general paralysis, atheroma of main vessels, and pachymeningitis hæmorrhagica over convexity of both hemispheres. No focal lesion of brain.

Aphasia also occurs in general paralytics from focal lesions resulting from disease of the main cerebral vessels.

Two types of such disease may be met with—syphilitic endarteritis and atheroma. MacFie Campbell in the paper mentioned insists on the frequent association of true syphilitic brain disease with general paralysis, but this combination is generally considered rare.

Atheroma of the main cerebral vessels is very frequent in general paralysis but by no means invariable, and it does not seem to be proportional to the duration of the disease, or to the severity of the other changes found in the brain. The frequency of the association probably depends on the fact that both are parasymphilitic in origin though developing independently, the general paralysis being a primary neuron degeneration.

Of the focal lesions resulting from vascular disease in general paralytics, softening from thrombosis is much more common than hæmorrhage. Gross softenings from thrombosis were found in ten general paralytics of our series, hæmorrhage only once.

In spite of the comparative frequency of such softenings in general paralysis aphasia is rare as a result, apparently rarer than when the softening depends on senile arterio-sclerosis.

In our first 973 *post-mortems* softenings resulting from the latter condition were present in 29 cases. In nine of these cases aphasia was observed, and in two others there was a history of its existence before admission. There were also three cases of softening due to embolism, of whom two exhibited aphasia. On the other hand out of ten general paralytics in whom gross softenings were found, only one exhibited lasting aphasia. In two other cases, transitory aphasic attacks occurred probably unconnected with the softenings found *post mortem*.

The difference does not seem to depend upon the size or distribution of the lesions. Possibly the explanation is that whereas softenings from senile arterio-sclerosis and from

embolism are frequently multiple, the lesion in general paralysis is often either terminal (followed by coma lasting till death), or else occurs at a stage of the disease when the mental state of the patient precludes satisfactory determination of his power to understand and to produce speech.

The following is a short summary of the case of a general paralytic who exhibited aphasia as the result of cerebral softening.

T. B—, male, æt. 52. No history of syphilis. Scar in right groin.

Condition on admission.—Confused, but not grossly demented. Paresis of right arm and leg, with spasticity and extensor response; sensation could not be satisfactorily tested. There was definite hemianopia. The pupils were equal, regular, and reacted normally at this time.

He exhibited well-marked visual aphasia and object-blindness. He could understand what was said as a rule and could spontaneously utter coherent sentences. When questioned he tended at times to repeat the same reply to successive questions.

He was unable to read and named letters wrongly, and unable to write his name or even letters with his left hand.

He was unable to recognise objects and did not know their purpose. He could not pick out from a collection of objects the one named. When told the name of an object, however, he could state its use.

For a time he improved somewhat; then had a right-sided Jacksonian convulsion followed by increase of his paresis and return to his former state of aphasia.

He had a number of such periods of improvement followed by relapse after a convulsion.

He was given large doses of potassium iodide and mercury without obvious result.

He became very demented, resistive and degraded, and developed Argyll-Robertson pupils.

Post mortem there were found: Typical lesions of advanced general paralysis, moderate atheroma of the main vessels, and an area of softening in the left hemisphere at the junction of the parietal and occipital lobes, extending from the level of the Sylvian fissure to the upper margin of the hemisphere. It involved the cortex and extended in to a depth of one-third of an inch.

The diagnosis of aphasia occurring in general paralysis may be divided into three parts: the determination, firstly, of the fact that the patient is a general paralytic; secondly, of the probable site of the focal lesion (if any) corresponding to the speech defect; and thirdly, of the nature of the pathological process causing this lesion.

The question as to whether the patient is suffering from general paralysis may be very difficult to decide clinically. The alternatives to be excluded in the cases under consideration are usually cerebral syphilis and cerebral arteriosclerosis.

A full discussion of the differential diagnosis of these three conditions is impossible here. The history may be suggestive, especially in such points as duration of symptoms, age of onset, and recency of syphilitic infection. In any of these conditions, the patient may exhibit dementia, epileptiform and apoplectiform attacks, ataxy, clumsiness and tremors, and increase of the tendon-jerks. Diminution or absence of tendon-jerks suggests general paralysis. In all the pupils may be unequal, irregular, and defective in reaction both to light and accommodation. When, however, the Argyll-Robertson phenomenon is clearly present, this is strongly in favour of general paralysis. While articulatory defects may be present in all, the type of speech present in some cases of general paralysis is almost pathognomonic.

Certain features of the mental state also may be very suggestive, especially the patient's self-satisfaction and lack of insight and of distress at his own mental defects.

At the present time the examination of the blood for the Wassermann reaction and of the cerebro-spinal fluid for the same reaction and for lymphocytosis affords valuable evidence, though not quite conclusive as between general paralysis and cerebral syphilis.

Even *post-mortem* the conditions may in some cases be impossible to distinguish without microscopic examination of the cortex, but well-marked granularity of the ventricles (especially the lower angle of the fourth) is strongly in favour of general paralysis.

In passing, I may say that in only a few of the above cases was the cortex examined histologically. In all recent cases the Wassermann reaction was employed where the clinical

diagnosis was doubtful. In all the cases mentioned as exhibiting aphasia or gross lesions accompanying general paralysis the clinical picture was quite characteristic of that disease, and *post mortem* there were present all the usual macroscopic appearances of it with none of those characteristic of cerebral syphilis.

The diagnosis of the site of the lesion from the nature of the speech defect presents nothing special beyond its difficulty in some cases owing to general dementia.

In regard to the diagnosis of the nature of the lesion causing aphasia in particular cases, one must distinguish between those cases in which aphasia is transitory and those in which it is lasting. The cause of the condition in the former is as obscure as that of all general paralytic seizures.

Of one of the conditions under which lasting aphasia is found I have no personal experience, namely, those cases where it results from a focal intensity of the diffuse process. In the reported cases, however, the onset has been sudden, and, judging from the published account, it would have been difficult or impossible to distinguish them clinically from cases with a focal lesion of vascular origin.

In cases with subdural hæmorrhage symptoms of cerebral compression sometimes exist at the onset, such as vomiting, slow pulse and respiration, choked disc on one or both sides, and contraction followed by dilatation of the pupils—the change in the latter being earlier on the side of the lesion. The resulting paralysis is frequently bilateral, and choreiform or athetoid movements in the affected limbs are relatively frequent.

In conclusion I should like to report a case presenting some points of special interest where the diagnosis is doubtful, the patient being still alive.

B. R—, female, æt. 40. No definite history of syphilis, but a history of venereal disease in husband. Several pigmented scars over lower part of back and abdomen. Has had several miscarriages and no living children.

Condition on admission.—Excitable, loquacious, self-satisfied and flippant. No motor or sensory defect except fine tremor of face and hands. Pupils unequal, irregular, inactive to light, reacted well to accommodation. Articulation normal.

Condition remained unchanged until, six months after admission, lumbar puncture was performed.

Owing to extreme restlessness a preliminary hypodermic injection of hyoscine hydrobrom. gr. $\frac{1}{100}$ and morphine hydrochlor. gr. $\frac{1}{4}$ was given. Ten c.c. of clear cerebro-spinal fluid were withdrawn and gave a positive Wassermann reaction.

She regained her normal state in a couple of hours and appeared to remain so for two days. On the third day she developed right hemiplegia, at first flaccid, later spastic. She was conscious, but unable to speak.

On examination her condition was as follows : Pupils equal and fixed ; jaws tightly clenched ; risus sardonicus ; bilateral paresis of tongue. Occasional stertor and difficulty in swallowing ; paralysis and marked spasticity of right limbs. All tendon-jerks much exaggerated, especially on right side—patellar clonus on that side. Plantar reflex, extensor on right, flexor on left ; deep and universal analgesia.

She was fully conscious. She could understand what was said and obeyed simple orders. She could read, and could write with her left hand spontaneously and to dictation. No object-blindness. She could phonate, but could not articulate any word, though when asked if she knew what she wanted to say she nodded, and could indicate the number of letters in the word by holding up fingers.

There has been considerable improvement in the motor symptoms during the past two months, but the defect in speech has remained unchanged. She can phonate, but has uttered no articulate word since the attack. This defect seems quite out of proportion to the bulbar symptoms.

In this case the diagnosis of general paralysis is fairly certain. The type of aphasia is that called by the exponents of the classical views "subcortical motor aphasia," and by Marie and his followers "anarthria."

The main questions of interest are the site and nature of the lesion underlying the defect and its relation to the lumbar puncture.

The association of the two may, of course, be a pure coincidence. In no case have symptoms resembling those seen in this patient been described in the literature as developing after lumbar puncture.

According to a recent paper by Lusk (7) on the accidents following lumbar puncture and spinal anæsthesia, all those reported are attributable either to the paralytic effect of the

drug, or to damage to the spinal cord or cauda equina caused by the needle.

Dr. G. M. Robertson has advanced the theory that subdural hæmorrhage is started by a fall of intra-cranial pressure usually caused by spasm of the cerebral vessels. It is conceivable that the fall of the tension determined by the withdrawal of fluid might act in this way.

On the other hand, lumbar puncture has been used for the diagnosis of subdural hæmorrhage and has been said to relieve the symptoms temporarily.

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"Forced Feeding," with Special Reference to a Case continuously fed by the Nasal Tube for over Nine Years.

By DAVID BLAIR, M.A., M.D., Assistant Medical Officer,
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THE subject of the few remarks I have to offer is one with which those who attend the insane soon become familiar. No other class of physicians can speak of it with more authority. It is not a wide field, and at the first blush would not appear to lend itself to much divergence of view. Yet from the opinions one occasionally hears expressed, I think it is expedient that our attitude towards the questions associated with artificial feeding should now and again be reviewed. When to feed artificially, its relative dangers, its moral effect, or even the best method to adopt, are points upon which observers differ.

We naturally base our opinions on the cases with which we have dealt or have actually seen ; while the extent and variety

of our individual experience are probably very different. One observer will testify that in dealing with several hundred patients he has never had to resort to the stomach-pump or nasal tube, but has always fed his patients with a spoon. Eminent men in the profession have testified to the cruelty and danger of the methods. And though these views may be extreme and somewhat exceptional, yet the opinion still seems to be fairly general that tube feeding, whether by the oral or the nasal method, belongs to the category of heroic measures, and should never be resorted to unless our patients are *in extremis*.

Although by no means accepting this limit to its application, I should like to refer to three cases which certainly illustrate its value in this category. The first I had to feed artificially without intermission for more than nine years. For the whole of that period she was determined to die, and left nothing undone to attain her end. She was bed-ridden, and absolutely refused all nourishment save that which was administered by the nasal tube or *per rectum*.

The patient was admitted to the Lancaster Asylum on July 5th, 1901, æt. 65. Previous to her admission she had been insane several times, and probably for several years. Rather weak and anæmic, she suffered from heart disease and dyspnœa. Delusions of persecution and frequent auditory hallucinations made her excited and violent. She believed she was lost beyond salvation, and had therefore lost all control of herself. She said she was afraid of the birds because they talked about her. The belief that she was the incessant topic of conversation by those around aroused her active resentment, and she would suddenly attack her neighbours with any weapon that came to hand ; and she was very suicidal. A few months after admission her delusions began to influence the taking of food. She insisted the roof of her mouth was gone, that she was gone, that she was dead, and finally refused food altogether. Before she was actually fed artificially her weight had come down from twelve stones to seven ; and from June, 1902, till October 24th, 1911 (when she died), she absolutely and successfully refused nourishment in any form which was not forced into her by the nasal tube or stomach-pump. To feed her even by these means was not easy. In fact she was a skilled resister to the passage of the tube. With a quite exceptional power of contracting the muscles at the back of her pharynx, she

could direct the point of the tube at will into the larynx. By manipulating her tongue, too, in a wonderful way behind the tube she could force the point into her mouth, biting it firmly with her teeth. If a stranger tried to feed her she would constrict her nares so tightly that he was sometimes unable to introduce the tube by the nose ; while the nasal mucous membrane became occasionally so œdematous that the oral method had for a time to be resorted to. From time to time, but especially in the first few months during which she was fed artificially, every known expedient was tried to induce her to voluntarily take food. Milk and nourishment in other forms were invariably left within her reach, but without success. Rectal feeding was employed as an adjunct to the nasal, but it soon resulted in diarrhœa. Slinger's suppositories seemed to be fairly absorbed for a short time, but the patient was a very unsuitable case for rectal alimentation. Forcibly constricting the external sphincter round the enema tube she could prevent the passage of fluid through it. When this form of resistance had been overcome she could successfully employ the internal sphincter as a detrusor and force the contents from her bowel.

In addition to the difficulties presented by her determined opposition to being fed and tended, we were, in the first few months, greatly hampered by sickness and diarrhœa.

But although her kidneys were implicated from the beginning, we found the diarrhœa was almost entirely due to the nutrient enemata and it ceased when these were suspended.

The sickness also seemed to vanish when we had gauged the limits of her absorbing capacity. This was found by actual experience to be the equivalent of two eggs and three pints of milk in the twenty-four hours.

During the first year in which she was fed artificially, her diet was repeatedly altered both as to contents, amount and frequency of administration. But every variety of change ultimately yielded to one egg beaten up in a pint and a half of sterilised milk, and this amount was given twice daily. Once every week one ounce of castor oil was added to the mixture. And this routine was continued practically unchanged for the last eight years of her life.

The patient did not limit her resistive propensities to the taking of food. She rendered the care of her excretory functions quite as annoying and much more revolting. She made

a practice of holding back her urine and fæces until exhausted. However long she might be seated on the night-chair she managed to prevent the discharge of her excreta until she was returned to bed. This she would immediately soil and flood, and the intense annoyance of the nurse in charge seemed to afford her sardonic glee. Frequent catheterisation was employed with considerable success, yet this was often a tedious process. By constricting her urethra round the rubber catheter she could entirely prevent the passage of urine through it and could effectually force the instrument out of her bladder.

In the first six years her weight varied very little. In 1902, when she began to be fed, she weighed 7 st., and in 1908 she weighed 6 st. 8 lb. From that time, owing to threatened sickness, we had at times to reduce the quantity of her nourishment, and specially to eliminate the eggs for long periods, so that she gradually lost weight. Last September she weighed only 4 st. 9 lbs.

Her pulse was slow, varying from 40 to 60, but the respirations were rather more frequent than normal. She had always albumen in her urine and occasionally some cystitis. In bed she invariably kept her legs flexed on her thighs and her thighs on her abdomen and violently resisted the routine straightening to which they were subjected. Towards the end it was impossible to do so, and her fixed position was that of the child *in utero*.

The *post-mortem* examination revealed nothing unexpected. The pia-arachnoid was thickened and there was considerable wasting of the convolutions. The ventricles were dilated and contained considerable fluid, while the cerebral vessels were atheromatous. In both pleuræ old adhesions were present. The bronchial tubes were inflamed and the base of the right lung was congested. The heart was flabby, mitral and aortic valves were thickened, while the latter were very calcareous. The liver and spleen were small, while the kidneys were very cirrhotic. The œsophagus and stomach were clean and healthy. There was no bed-sore and no sign of phthisis.

A case like this illustrates how long life may be prolonged even in the most unfavourable cases granted patient attention to every detail of nursing, by the administration of small and carefully gauged quantities of nourishment. Not only can life be prolonged, but even under these very exceptional conditions

the *vis medicatrix naturæ* will sometimes assert itself in a quite unexpected way. Several years ago a senile melancholic under my care, in an advanced stage of arterio-sclerosis associated with chronic Bright's disease, was fed almost without intermission for two years. The heart's action was irregular and the left ventricle considerably enlarged. She spared no effort to prevent food entering or remaining in her system. Between her power of rejecting the feeding mixture and her poor digestion, there were certainly long periods when she did not retain more than about two pints of milk daily. In one of her limbs gangrene began. Her friends so stoutly opposed operative interference and the case seemed so hopeless that one had simply to allow the part to die "progressive." Ultimately an auto-amputation below the knee took place and there was practically no further trouble with this condition. At a later period, while still being fed, she forced her arm between the boards of a wooden bed on which she was lying and fractured the neck of her humerus. She fought hard against all treatment and violently resisted the application of splints and bandages. Even when she seemed to be sufficiently restrained she invariably succeeded in tearing them off. Finally the shoulder was put up in plaster and the arm bound to the body by plaster bandages. When these were taken off the fragments seemed to have united in a perfectly satisfactory manner and the complete use of the arm was restored to her. After her death the joint was examined and the head of the bone was found firmly united to the shaft, the neck having entirely been absorbed.

One other case, fed uninterruptedly for six months, which seemed as hopeless as either of these when she began to be fed artificially, had the advantage of youth. Some years ago she came under our care in an acutely suicidal condition. She attempted to batter the framework of the bed with her head, made sudden darts at the window, refused all food, and violently resisted everything that was done in her interest. The undivided attention of at least two nurses was monopolised by her for many weeks. All nourishment had to be administered artificially, and she was fed many times daily by the nasal tube or *per rectum*. In her desire for death she constricted the sphincters of her bladder and rectum so persistently that even her excreta had to be artificially removed.

In two or three months undoubted symptoms of phthisis began to appear, and she became very ill. The family physician of her relatives came to see her, and expressed the opinion to the parents that she had only an hour or two to live.

However, we continued to treat her in bed in the open air, while as much food as she could assimilate was administered artificially. By slow stages she improved, until all signs of phthisis, and even insanity, seemed to leave her, and she became a quiet, useful member of the asylum community.

By-and-by, when recovered for all intents and purposes, she was taken home and lived a most useful life there for at least three years.

Reflections on the history of cases such as these cannot help suggesting a crucial question. Let us take, for instance, the first case. For nearly ten years the patient had fought actively and passively to take her own life, while the nurses successfully defended it. This woman was the offspring of degenerate stock ; there was practically no prospect of her mental recovery, and she was an expensive patient to the country. To keep her alive was no doubt an illustration of that enthusiasm of humanity, that high Christian ideal of seeing in every human being a spirit made in the image of God, and capable of rising into a divine and eternal life. But in view of the serious burden to the ratepayer, are we not bound to ask if we are allowing our benevolent instincts to over-ride our common-sense? Happily for us questions such as these as yet need not hamper our routine of duty. The other side of the picture alone concerns us. From records of such cases we are surely justified in congratulating ourselves on the high standard of excellence to which the modern asylum nurse has attained. There was here none of that stimulating excitement which sustains attention on acute bodily disease. The work was not only monotonous, but it was irritating and revolting. Yet incessant care and the nurses' best endeavour were always imperative and conscientiously bestowed. And although it is a common picture in the asylum world, yet it is none the less pleasing to find among our nurses devotion to duties such as these, and that enthusiasm to excel in work like this can, and does, exist.

When to begin to forcibly feed a patient may give rise to

some doubt. It is practically an axiom that it should never be done if it can possibly be avoided; that we should never resort to the stomach-pump or nasal tube if we can persuade the patient to take his food in a natural manner. There is a measure of truth in this, but it really depends on how much food the patient can be got to take in a natural manner and how much persuasion is required.

One would certainly spare no pains to diagnose the cause of the refusal of food and treat that if possible. One would, of course, never use these methods because the routine asylum dietary was declined when the patient really would take a sufficient amount of nourishment of a kind more suited to his taste. But in cases where patients, from caprice or perversity, continue to decline their food unless some unusual diet is supplied, I have found it best in their own interest to feed them promptly by the nasal tube. It may probably have to be done only once.

When hallucinations of taste or delusions of food being poisoned or of a command from the Almighty not to eat are present, although the patients may be persuaded to take some food, yet I have invariably found that the feeding is entirely unsatisfactory, and that regular feeding by the nasal tube is the best treatment. Similarly, there are patients with hallucinations which may have nothing to do with their food, but which so entirely dominate their attention as to render the stimulus of hunger and the calls of nature unfelt, or at least ignored. If these, although fed with fair regularity by the nurse, are yet losing weight, I think regular and persistent tube-feeding is indicated.

To wash out the stomach before beginning forcible feeding is quite a good routine practice.

§ In cases where the refusal of food is due to a disordered condition of the alimentary tract with constipation, one or two enemata accompanied by washing out the stomach will often be found effectual. But even then I think that tube-feeding for a short time stimulates the digestive functions and hastens the restoration of the normal. When any kind of medicinal treatment urgently needed is effectually resisted, its administration by the tube is the rational course. In cases of habitual constipation where the patients decline an aperient, I have found the mere exhibition of the tube or at most one or

two applications of it have permanently cured this form of perversity.

In the case of a strong, well-nourished patient, who declined food, two or three days of starvation would probably add to his physical well-being and be the best treatment. But, with these exceptions, no good, and much harm, may result from delay.

As to the method, I much prefer the nasal to any other. Occasionally one is confronted by a patient who has such an abnormal power of directing the point of the tube into the larynx that it is advisable to feed by a very wide œsophageal tube introduced through the mouth. I have one such case at present whom I have never succeeded for this reason in feeding through the nose, but who can be fed quite easily by the tube passed through the mouth. Damage is usually done to her gums, however, by the great resistance she offers to her jaws being forced apart by the gag. Sometimes the mucous membrane of the nares gets congested and it is well to introduce the tube by the mouth for a time. Owing to the nasal septum being deflected to one side, as a rule it is much easier to pass a tube through one nasal passage than the other. The danger of this method has sometimes been exaggerated. But it is well to attend to one or two simple points. A tube should be employed, not a catheter. The apparatus to which I have become accustomed is a glass filler and a tube about three feet long. The tube tapers very gradually towards the point, but has an average diameter of about a quarter of an inch. Four or five inches from the filler the rubber tube is interrupted by about four inches of glass tubing. After passing the tube the ear should always be applied to the filler before any fluid is introduced. Before the feeding mixture, a little water should be poured down as an additional precaution. Anyone accustomed to nasal feeding soon acquires a *tactus eruditus*, which rarely fails to indicate during the passage of the tube if the right course has not been followed. And if the ear is applied to the filler it is almost inconceivable that anyone could fail to detect whether or not the point of the tube was in the larynx. Where the tube does tend to be deflected into the larynx, it is well so soon as the point has reached the pharynx to flex the head until the chin is on the chest, and then to continue the passage of the tube into the œsophagus. By this means I have fed

people who could not swallow, especially those in the late stage of general paralysis, patients suffering from all forms of heart disease, and even some in the unconscious state. After sixteen years' almost continuous experience of it without accident of any moment, I believe that, far from being very dangerous, it is safe, and much more so than any of the incomplete measures some advocate.

Where one is dealing with those whose feelings and judgment are no reliable guides to the amount of nourishment they should take, tube-feeding is the best means of ascertaining the condition of their alimentary tract and of gauging their digestive capacity. And when one reflects that on the nourishment administered exclusively in this artificial way fractures may heal, signs of phthisis may disappear, and life may be most remarkably prolonged, surely we must agree that nasal feeding is not overdone in asylums, but that the tendency is quite in the other direction.

DISCUSSION,

At the Quarterly Meeting, held at Long Grove Asylum on February 22nd, 1912.

The PRESIDENT said that they were obliged to Dr. Blair for giving the meeting the results of his experience. He congratulated him on having been able to keep the patient alive on this treatment for nine years. It said a good deal for the care and persistence exercised by him, and for the high standard of the nursing in his institution. He was sure that many would wish to discuss the paper.

Dr. P. T. HUGHES said he had listened with great interest to the paper, but he took exception to one matter in it, namely, the suggestion that, in the case in which the feeding was carried on for nine years, it was possibly something which should not have been done, or that there was a possibility we were far too sentimental in keeping such a case alive. He believed any such idea as that was quite wrong. To withhold treatment from such a case, even though the treatment was only feeding, would not be defensible. It would be simply a variant of the old idea of a lethal chamber, and such an idea should not be entertained for a moment, otherwise the whole underlying principle of treatment of the insane would be debased. Though the case which was fed for nine years was so unsatisfactory, the second case which the author described was an absolute success, and he would like to hear how one could judge at the beginning what cases were likely to be successful. Everyone with asylum experience had to feed cases who resisted, and he contended that in the present state of our knowledge no one could tell whether a given case would recover or not. One could only go on with the feeding and hope for the best. Another matter which he was sorry to hear mentioned was that the symptoms and behaviour of the patient caused "great annoyance" to the nursing staff. It struck him as very sad that symptoms shown by any patient should cause annoyance to nurses; it was wrong for a nurse to entertain such feelings towards any patient.

Dr. J. F. BRISCOE desired to congratulate Dr. Blair on his most successful case. It was not his business or intention to make any comments on the question of sentiment, whether with regard to insanity or cancer. The text of the paper was forcible feeding. At Lancaster Hospital nasal feeding was employed, and there were other asylums and hospitals which placed their confidence in the œsophageal tube. He had himself very little confidence in the use of the nasal tube. The

whole subject of forcible feeding had been brought before the Association previously, and after discussing nasal feeding as against œsophageal the adherents of the latter method were in the majority. He did not say that in the hands of those accustomed to nasal feeding, and who were skilful, the results were not good, but, with all respect to Dr. Blair, he preferred to use the œsophageal tube.

Dr. PERCY SMITH thought, in view of a recent politico-legal event, that the Association should definitely state that artificial feeding, whether by the œsophageal tube or the nasal tube, was practically adopted in all asylums throughout the country, and that many patients were fed daily in this way. He would say, based upon his experience, that at Bethlem Hospital every day four or five patients were fed three times each day by that method. Multiplying that by the number of days in the year, it gave a good many of those operations at one institution alone. He was much in favour of the nasal tube as against the œsophageal, and he believed it would be found that the nasal tube was the favourite means of feeding forcibly; but there were cases which could not be fed in that way, and which had to be fed by the œsophageal tube. It could be stated positively that there were large numbers of patients who, if they were not fed, would die, and it was the medical man's plain duty to prevent the patient dying if that was by any means possible. He would be very sorry if there were any suggestion in Dr. Blair's paper that at any time euthanasia should be promoted; plainly patients should not be allowed to die if that could by any means be prevented. Many patients were tided through a period of refusal of food, and in that way put on the road to recovery. In every case naturally one tried persuasion first, and that was mentioned in the politico-legal case which he had in mind. If that failed, other methods must be adopted. There could be no doubt that œsophageal or nasal feeding, with very rare exceptions, was carried out without the slightest injury to the patient. Of course, in the case of œsophageal feeding there might be injury to the gums or teeth, but he had not seen injury of any kind happen to a patient from nasal feeding, except perhaps a little soreness of the nose, which was quite a minor matter. It was equally certain that with many patients once feeding in that way was sufficient, for they disliked it so much that they afterwards took their food in the ordinary way. It was not sufficient that the patient should be taking small quantities of nourishment by spoon or feeder, for the object was not merely to maintain a moderate amount of nutrition in acute cases, but to feed until the patient was actually gaining weight, and thus place him in a position to have his mental health thoroughly re-established.

Dr. SEYMOUR TUKE said he thought it was a good thing to have this subject brought up for discussion at intervals, and he well remembered the meeting referred to by Dr. Briscoe when the subject was thrashed out. In connection with it there were many things to consider. He had had to carry out a good deal of tube-feeding, and he confessed that in many ways he preferred the œsophageal tube, in spite of what he had been taught. One great advantage of feeding by means of the œsophageal tube was the rapidity with which it could be carried out if the patient was not particularly troublesome. Of course if strong objection was manifested and great fuss was being made by the patient, one must resort to the nasal tube. It was more possible to keep the patient quiet while using the nasal tube than during the employment of the œsophageal tube. He always restrained a patient if he had to feed him or her, because it was the safest plan. The Commissioners in Lunacy wished to have a record of mechanical restraint, and for a considerable time his brother and he kept records of the time occupied in feeding a case, and it worked out at under three minutes from the time the patient was sat in the chair to the conclusion of the operation. No nasal operation could be carried out so quickly as that, because the fluid could not pass through fast enough. He remembered having to feed one case of stuporose insanity for several years in that way, and the case did remarkably well for quite a long time, though eventually it did not recover. Recently he had had a case of at least very great improvement, if not recovery, after feeding artificially for over a year. It seemed to him that the author was somewhat unjustly attacked by the first speaker, for he did not understand Dr. Blair to give an opinion on the propriety of leaving such people alone, but he understood he gave two alternatives, stating that of the two he was distinctly in favour of the humanitarian method of feeding, putting on one side any idea in the opposite direction.

The PRESIDENT said his own impression from hearing the paper was similar

to that of Dr. Seymour Tuke ; he did not understand Dr. Blair to set forth such extremely heterodox doctrines as those which had been attributed to him. That a nurse would occasionally feel some annoyance at having to work with a patient such as the one described was no more than to say that she was human. With regard to the comparative merits of nasal and œsophageal feeding, it was possible to talk almost for ever on such a subject, because both methods were very good in their own way, and he thought Dr. Seymour Tuke had summarised the matter in a nutshell. Where the patient resisted violently he considered that nasal feeding was the better, but where the patient could be fed without much trouble the œsophageal method was less disagreeable to the patient, and was much more rapid in use.

Dr. BLAIR, in reply, thanked the meeting for its courteous attention. With regard to the point raised by the first speaker, Dr. Tuke correctly said that he, Dr. Blair, simply put the question. It was the question which was suggested by all who came to see the case. He would not like it to go forth that nurses in asylums expressed disgust at having to carry out such procedures. His object had rather been to demonstrate the devoted care which the nurses gave to such cases.

An Inquiry into the Occurrence of an Inherited Tendency to Insanity in the Insane of a Rural Population. By JAMES FREDERICK CORSON, M.D., D.P.H.Camb., Assistant Medical Officer, Bucks County Asylum.

The important part played by heredity in the causation of insanity has long been recognised. Much has been written on the subject and investigations have frequently been made to show its influence. Owing to the complexity, variability and general indefinite character of insanity these inquiries have been mainly statistical. It is recognised that no form of insanity is of such definite and simple nature as to be readily available for study in its hereditary aspect by Mendelian methods. As has been repeatedly stated by various writers on the subject, it is not insanity, recognisable as such, that is inherited, but an abnormal nervous system liable to the development of the various conditions included in the term "insanity."

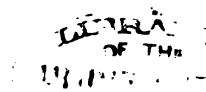
In his book on *Mendel's Principles of Heredity* (I), Professor Bateson refers to this aspect of the subject as follows :—"Forms of insanity, which appear when the individual is subjected to various strains and excitements, may not appear at all if these causes be absent. The element transmitted is evidently the liability, not necessarily the developed condition. The descent of such peculiarities is therefore beyond the range of our analysis."

Dr. Bevan Lewis, in an address on "The Biological Factor in Heredity" (2), recognises the same difficulty in dealing with mental disease. He says, "It is obvious that it is not the insanity that is transmitted, but the psychopathic basis out of which the insanity is evolved. . . . But here we observe we are dealing, not with any simple factor to which Mendelian principles can be readily applied, but rather with an enormously complex aggregate of factors which still awaits our patient analysis. The psychopathic constitution, far from being one and indivisible, is not necessarily identical for any two individuals, nor for any two forms of mental disturbance."

Apart from this, the collection of detailed and accurate information respecting all the individuals, sane and insane, of a family or stock, with the connections by marriage, would appear to be in most cases a matter of almost insuperable difficulty.

Hence it is that inquiries, attempting to give some quantitative estimate of the influence of heredity in insanity, are, in the main, statistical in character.

Considerable differences exist between the figures of various investigators of this subject. This is partly due to the fact that, in some statistics, insanity alone, occurring in relatives, is taken as evidence of an inherited predisposition, whilst in other statistics there are included also such alleged causative agents as alcoholism, tuberculosis, syphilis, epilepsy, eccentricity and other neuroses. The question of the inclusion or otherwise of these affections, occurring in the relatives of the insane, as evidence of the transmission to offspring of a tendency to insanity, is one of some difficulty. In the case of alcoholism, tuberculosis, syphilis and some other diseases, the question of the inheritance of acquired characters arises, but more particularly, admitting Weismann's doctrine that environment has practically no effect on the germ-plasm, whether such diseased conditions should be regarded as acquired characters or not. There appears to be some difference of opinion upon the latter point, but the majority of physicians to whose expressed views I have had the opportunity of referring incline to the opinion that such affections should not properly be regarded as acquired characters in the sense that, for example, a developed musical ability or the trained muscular sense in a banker or billiard expert is so regarded.



It is a matter of such importance in heredity that some opinions may be quoted. Dr. Donkin, speaking on "Some Aspects of Heredity in Relation to Mind" (3), refers to the subject in the following words: "Those who accept, as most biologists ostensibly accept, the conclusion that characters developed by parents after birth in response to environmental influences are not transmitted to offspring as innate characters not requiring such influence for their development, must reject wholly the doctrine that bad nutrition or other evil conditions or diseases, contracted by the parents, can appear in the offspring in the form of such abnormalities of the brain, as must subsist in all, as it is known to subsist in many, of the cases of mental defect we are now considering." From this it would appear, if I interpret the sentence correctly, that Dr. Donkin regards such diseases as acquired characters, and regards a belief in their influence as a cause of mental defect in offspring, as dependent on the acceptance or otherwise of Weismann's doctrine.

Many, on the other hand, hold a different view. Dr. Mott, in the recent Huxley Lecture on the Hereditary Aspects of Nervous and Mental Diseases (4), says in reference to alcoholism: "That the germ-cells are sequestered—'in the body and not of the body,' therefore not participating in the bio-chemical changes which occur therein—and that, in prolonged toxic conditions are uninfluenced in their nutrition and their specific vital energy, is contrary to reason."

Similar views are expressed by Dr. Wigglesworth (5). Speaking of alcoholism in parents, he says: "The particular case we are now considering has nothing whatever to do with the inheritance or otherwise of acquired characters. What we are here concerned with is a direct poisoning of the germ-plasm itself by means of the alcohol circulating in the blood and consequent direct injury to the delicate cells of which the structure is composed, which by virtue of this injury are thereby prevented from developing into a stable organism."

He states that similar considerations apply to the cases of so-called inherited syphilis.

Dr. Tredgold (6) considers that germinal plasm is capable of modification by environment, and that the alteration so produced may very materially affect subsequent generations, and expresses the view that certain diseases, chiefly alcoholism

and tuberculosis, bring about deterioration of the germ-plasm. Hence the weight of opinion is against regarding such toxæmic conditions as acquired characters.

Admitting that such conditions, occurring in the parents and other ancestral relatives of the insane, should be included as exerting hereditary influence, they, together with eccentricity and other neuroses, present considerable difficulties in the preparation of statistics. Such statistics depend largely upon information supplied by relatives of the insane, and the interpretation by them of such terms as eccentricity, asthma, alcoholism, and consumption is too varied to be reliable. Not only so, but knowledge of such affections existing in the family is by no means complete. Certified insanity, on the other hand, is a definite fact, not subject to individual opinion, practically speaking, and not liable, to the same extent, to be unknown or beyond the reach of inquiry. Accuracy of information as regards this particular depends mainly upon thoroughness of inquiry and the amount of deliberate concealment effected by relatives from motives which are obvious and natural.

There are objections, however, to the view that statistics which are based upon a mere enumeration of cases with insane relatives represent a correct statement of the numerical proportionate value of heredity as a cause of insanity. They have been clearly stated by Dr. Mercier in Hack Tuke's *Dictionary of Psychological Medicine* (7), and I quote here two of the most important :

“1. The factor directly inherited is not insanity but an instability or disordered arrangement of nerve-tissue which allows insanity to occur. . . . We must look for the heritable antecedents of insanity, not alone in insanity itself as existing in progenitors, but in all maladies which display evidence of undue instability or disorder of the highest nervous arrangements.

2. Even when successfully and completely carried out it (*i.e.*, this method) leaves one half of the field of hereditary antecedents unreaped—it neglects entirely one, and that not the least important, of the two laws of heredity. For the production of normal offspring it is necessary not only that the parents be each of them normal, but it is also necessary that the sexual elements of the parents be suitable one to another. A

defect in nervous organisation of the offspring may arise from unsuitability of sexual elements of two normal parents."

The latter of these objections indicates the origin of an unstable nervous system as a sudden variation or mutation, which would tend to be transmitted to offspring. The association of insanity in offspring with insanity in several ancestral relatives, especially as regards those forms which appear at a comparatively early age, is so frequent, taking into consideration the difficulties of obtaining information, that this mode of origin as a mutation may not perhaps be of such importance as is suggested. The former objection has already been referred to. These considerations, while diminishing to some extent the value of such statistics, do not, I think, destroy their practical worth. Regarding the statistics as not representing exact proportions but rather as a minimal statement of hereditary influence in insanity, it may be claimed that they afford valuable information and that useful inferences may be drawn from them.

Perhaps the chief defect of the method is due to the fact, previously mentioned, that the results in most cases so largely depend on information supplied by relatives. Lack of information due to ignorance on the part of the relatives of cases of insanity in the family is more likely to be met with in large industrial areas, where there is much moving about of the population with breaking up of families, than in rural districts. In cases of senile insanity so few relatives with much knowledge of the family are accessible that information is likely to be deficient.

In connection with a consideration of the defects of the method and the possible sources of error, the question of the number of cases arises. As a rule, in statistical inquiries, the greater the number of cases dealt with, the nearer to the truth are the results. This does not obtain, I think, in the present case. Admitting a certain percentage of error from insufficient information, a mere multiplication of numbers will not tend to eliminate this but rather tend the other way owing to the greater difficulty of making a fuller investigation of the greater number. At the beginning of this inquiry it was thought that some of the above-mentioned defects would be minimised in the case of the insane of the county of Buckingham, partly on account of the habits and mode of life of the population, which

is mainly a rural one, and partly by taking precautions in the preparation of the statistics, to exclude some of the sources of error.

The people of the working class are largely employed in agriculture and in certain trades more or less characteristic of the county, and families tend to remain in certain districts for several generations. It is generally stated that in many of the villages there is much intermarrying of related families.

It was consequently thought that inquiries would elicit fairly full information, and also that, where insanity was known to occur in antecedent relatives, many of the cases would have been sent to the Bucks County Asylum and be available for further reference. In order to make the figures as far as possible truly representative of the population properly belonging to the county, all out-county patients and also all patients known not to have been natives of the county have been excluded.

It is perhaps hardly necessary to state that all additional admissions of the same patient within the period selected have not been counted, so that the figures refer to individuals and not admissions.

The statistics and observations presented in this paper refer to patients admitted to the Bucks County Asylum during a period of nearly eleven years, from January 1st, 1900, to October 31st, 1910. The period taken is sufficiently recent for information to be within the memory of persons supplying it, and, while comprising a sufficient number of cases to enable figures, large enough for fair comparison, to be made, does not involve too great a number to permit of each case being investigated. One of the chief difficulties in tracing ancestors of insane patients was found to be the change of name by marriage. In all cases when the maiden name could be ascertained search has been made, and in several instances additional information has been thereby obtained. Certified or certifiable insanity in relatives has alone been considered in preparing these statistics. For reasons mentioned previously, other affections generally believed to have an important hereditary influence have been excluded, although, during the inquiry, their frequent occurrence in association with insanity has been noticed. Ancestral and co-fraternal relatives only have been selected as indicative of hereditary influence,

cousins, nephews and nieces and sons and daughters being excluded. Hence the figures have a minimal value, and by no means represent an over-statement of the influence of heredity in insanity.

In the method adopted I have been guided by previous researches on the subject, particularly by a paper by Dr. W. F. Farquharson (8), based on Dr. H. Grainger Stewart's method, and also by the Huxley lecture by Dr. F. W. Mott, as published in the *Lancet* (4).

In addition to examining the cases from a statistical point of view, I have given some attention to certain families which have shown a comparatively large occurrence of insanity, and in which a strong hereditary predisposition to insanity was apparent. In some of these cases pedigrees are given which serve to illustrate some of the conclusions drawn from statistical figures.

I am much indebted to Dr. H. Kerr, the Medical Superintendent of the Bucks County Asylum, for help in many ways during this inquiry, and have received much assistance from the assistant clerk to the asylum.

The Proportion of Cases with Hereditary Predisposition.

The total number of cases admitted during the period was 1,131, consisting of 551 males and 580 females. Of this number, 360, comprising 151 males and 209 females, had an ancestral history of insanity. The numbers are conveniently stated in tabular form as follows :

Number of male hereditary cases	.	.	.	151
„ female „ „	.	.	.	209
				<hr/>
				360
Number of male non-hereditary cases	.	.	.	400
„ female „ „	.	.	.	371
				<hr/>
				771

Calculating percentages it is found that 31·8 *per cent.* of the cases showed insane hereditary influence, and, taking the sexes separately, it was present in 27·4 *per cent.* of the males and in 36 *per cent.* of the females. The figures of other observers may be quoted for comparison.

Farquharson: Total 30·7 *per cent.*; males, 27·4 *per cent.*; females, 34·16 *per cent.*

Stewart (quoted by Farquharson): Total 49·6 *per cent.*, eccentricity in relatives being included.

Urquhart (9): Total 45 *per cent.*, with hereditary history of insanity only; total 72 *per cent.*, with hereditary neuropathic history.

Hack Tuke (quoted by Urquhart): Total 20·5 *per cent.*

Savage (quoted by Urquhart): Total 34 *per cent.*

Wiglesworth: Total 28·01 *per cent.*, insanity, epilepsy, or marked degrees of eccentricity or peculiarity in relatives being included; males, 24·74 *per cent.*; females, 31·16 *per cent.*

F. R. P. Taylor, ('Annual Report of East Sussex County Asylum, 1910'): males, 28 *per cent.*; females, 43 *per cent.*

These results are not strictly comparable owing to the inclusion or exclusion of other neuropathic conditions besides insanity as hereditary factors. Different conditions of life in different parts of the country may also cause a real difference in the various figures.

The question of hereditary influence in such affections as general paralysis of the insane and organic brain disease, and especially as regards the former, is one upon which there is considerable difference of opinion. In the Huxley lecture, to which reference has already been made, Dr. Mott expresses the following view: "Many of the inmates of asylums are suffering with congenital or post-natal organic brain disease; these conditions are certainly not due to inheritance. General paralysis of the insane, syphilitic brain disease and softening from vascular disease are acquired conditions, and should not be classed among the inherited insanities, nor should Korsakoff's psychosis and chronic alcoholism."

Other physicians have expressed different opinions in the case of general paralysis of the insane.

In a very careful examination of seventy-two cases of this disease (10), Dr. J. S. Bolton found a family history of actual insanity in forty-five cases or 62·5 *per cent.*; including an ancestral history of epilepsy the percentage was 69·4, and there was a total psychopathic heredity of 81·9 *per cent.*, with an abnormally high family death-rate in another 9·7 *per cent.*

In the Morison lectures of the year 1907 (9), Dr. A. R. Urquhart says: "My experience leads me to believe that the

hereditary factor is of importance in general paralysis. It used to be regarded as not a hereditary disease, an opinion which must be revised if my experience is common, for in reference to these forty cases of general paralysis, the heredity of insanity finds expression ten times, eccentricity four times, neurosis twelve times, and alcoholism fourteen times. There was a distinct neuropathic heredity in thirty-two cases."

Näcke (11) found that in Bosnia, although syphilis is extremely common and usually severe, yet general paralysis is extraordinarily rare. He considers that this cannot altogether be explained by the change in relationship between general paralysis and syphilis, under the stress of civilisation, as seen in Japan, Roumania, and amongst the American negroes. He concludes that in most, if not all, cases, the general paralytic possesses an invalid brain either *ab ovo* or developed later, and thus, as a rule, presents a degenerative predisposition which is excited into activity by syphilitic infection, though such infection is not essential to the manifestation of the disease.

Bianchi (12), in a study of 87 cases of general paralysis, found heredity as sole cause in 17 and, combined with other causes, in 48 instances.

Ameline (13) found heredity (including alcohol and neuroses) present in 120 out of 238 cases of general paralysis, or about 50 *per cent.* In my cases there were 61 cases of general paralysis, consisting of 55 males and 6 females. Of these, 13, 11 males and 2 females, had a history of insanity occurring in relatives, forming 21 *per cent.* of the cases of general paralysis. In none of these cases, however, was there an extensive ancestral occurrence of insanity, such as was found in many of the cases of manic-depressive insanity. Possibly deficient history, which, as Dr. Bolton has pointed out (10), obtains to a greater extent in this form of insanity than in most others, may partially account for this.

As regards insanity due to arterio-sclerosis or other vascular changes, Dr. Urquhart's view may be quoted as differing from the opinion of Dr. Mott mentioned above. In reference to these cases he says: "We have to deal with a condition which has certain hereditary relations owing to a defect of organisation and comparable with arterio-sclerosis, gout and other diseases of obscure causation. It is not the crude heredity of yesterday, but a failure in development or metabolism, or a weakening of

somatic defences, apparent in early life, in the period of development, in the stress of maturity, or in the decay of old age. And the more marked the parental defect the earlier will be the failure of the new organism exactly in conformity with the vital statistics of gout (9)."

Cases of senile dementia present some difficulty in this connection. The fact that they have lived to old age without becoming insane suggests, as Dr. Clouston has remarked (14), a slight neurotic heredity or great absence of exciting causes of disease. The frequent occurrence, in these cases, as seen *post-mortem*, of vascular degenerative changes, and marked cerebral pathological lesions, tends to make the occurrence of insanity in relatives less convincing as evidence of an inherited predisposition to insanity.

Dr. Bevan Lewis considers that heredity plays some part in the causation of senile insanity as the following quotation indicates (15): "We should therefore incline to the view that the senile insane exhibit a fairly average predisposition to insanity, and that possibly its late development in such subjects may depend upon the nature of the neurotic inheritance and the developmental period during which it was originally acquired by the ancestor."

When all cases of general paralysis, organic brain disease, and definite senile dementia are excluded, the following figures are obtained for the remaining forms of insanity:

Number of male hereditary cases	.	.	.	128
„ female „ „	.	.	.	187
				<hr/>
				315
Number of male non-hereditary cases	.	.	.	268
„ female „ „	.	.	.	272
				<hr/>
				540

The corresponding percentages are higher, 36·8 *per cent.* showing hereditary influence. Of the males 32·3 *per cent.* and of the females 40·7 *per cent.* show evidence of an inherited liability to insanity.

The Influence of Insane Heredity in Different Forms of Insanity.

The classification of insanity into different forms, being mainly symptomatic, is somewhat unsatisfactory; but, if the

figures are regarded as representing approximate proportions, a comparison of the different forms of insanity in hereditary and non-hereditary cases is useful. I have included the cases in eight forms of insanity. The manic-depressive class, by far the largest, is chiefly composed of cases of ordinary mania and melancholia, but includes less definite cases where it has been difficult to decide whether or not to regard them, in the case of some, as cases of dementia præcox, and in the case of others as cases of delusional insanity. The questions of age of onset, predominance of sensory and emotional symptoms, and recovery have been considered in deciding upon these cases. Cases showing an alcoholic history have been decided on the same lines.

The class of epileptic insanity does not include cases of idiocy and marked imbecility with epilepsy, these being placed in the class of congenital idiocy and imbecility. The group of cases of senile dementia is limited to unrecoverable senile, first attack cases, where dementia was prominent and where the general symptoms and course pointed to this diagnosis. Some of the cases of organic brain disease were also senile, and in most cases of both classes definite pathological brain lesions in all probability existed.

The following table shows the proportionate occurrence of the different forms of insanity in hereditary and non-hereditary cases respectively and in both together.

	Hereditary cases.		Non-hereditary cases.		All cases.	
	No.	Percentage of total.	No.	Percentage of total.	No.	Percentage of total.
Manic-depressive .	217	60·3	340	44·9	557	49·2
Delusional .	32	9	60	7·7	92	8·1
Dementia præcox	24	6·6	23	3	47	4·1
Epileptic .	13	3·6	49	6·3	62	5·5
Congenital (idiocy and imbecility) .	29	8	68	8·8	97	8·6
General paralysis .	13	3·6	48	6·2	61	5·4
Organic brain disease .	10	3	47	6·1	57	5
Senile dementia .	22	6·1	136	17·6	158	14
	360		771		1131	

These figures show a relatively large proportion of cases of manic-depressive insanity in the group of hereditary cases as compared with the non-hereditary group, 217 or 60·3 *per cent.* of the former and 340 or 44·9 *per cent.* of the latter being cases of this form of insanity.

The comparatively small number of cases of senile dementia with an insane ancestral history will be noticed. There were more cases of dementia præcox with an insane heredity than without, and a relatively much greater proportion.

A better comparison between the different forms of insanity is made by calculating the proportion of cases with insane heredity to the total number of each form. The following table shows this in percentage figures.

	Males.	Females.	Total.
Manic-depressive insanity	36	41·1	38·6
Delusional	25·6	41·5	34·8
Dementia præcox	40	63·6	51
Epileptic insanity	16·1	28	23
Congenital (idiocy and imbecility)	28·8	31·6	29·9
General paralysis	20	33	21·3
Organic brain disease	13·1	26·3	17·5
Senile dementia	11·3	15·6	14

This table shows a high percentage of hereditary cases in manic-depressive insanity, delusional insanity, and dementia præcox, forms which develop usually in comparatively early life. In the cases of manic-depressive insanity, 36 *per cent.* of the males and 41 *per cent.* of the females have a definite history of insanity in relatives, giving a total of 38·6 *per cent.* In the previous table it is seen that 49·2 *per cent.*, or practically one-half, of the patients admitted within the period were suffering from this form of insanity. When it is also remembered that manic-depressive insanity occurs chiefly in early adult and middle life, that it has by far the highest recovery-rate, the shortest duration of attack, and is practically the only form in which true recurrence takes place, the great influence of this form of insanity upon succeeding generations is realised. It is evident that a marked hereditary tendency to insanity is transmitted from generation to generation chiefly in association with this form of mental disease.

Dr. Mott found insanity to occur in other members of the family in 55 *per cent.* of cases of manic-depressive insanity, and the above figures are in agreement with his conclusion that the

four types, manic-depressive insanity, delusional insanity, dementia præcox and imbecility, have the most marked tendency to inheritance. The figures of other observers are quoted for the purpose of comparison.

Dr. Wigglesworth (5) :

Congenital	44·11 <i>per cent.</i>
Epileptics	31·66 „
General paralysis	18·93 „
Mania, melancholia, dementia, etc. (excluding the above three types)	28·85 „

Dr. Farquharson (8) :

Congenital imbecility	34·9 „
Epileptic insanity	22·7 „
General paralysis	18·6 „
Mania	32·5 „
Melancholia	34·7 „
Dementia	18·8 „

Dementia præcox is undoubtedly due in great measure to hereditary influence. It has the highest percentage figure in my list, and several of the cases showed a large occurrence of insanity in ancestral relatives.

Cases of pronounced congenital mental defect (idiocy and imbecility, with and without epilepsy) formed 8·6 *per cent.* of the total cases admitted. An insane ancestral history was present in 29·9 *per cent.* of these cases. This is a lower figure than is usually obtained, and may be due, in part, to deficient information. The lesser degrees of mental defect are not sent to asylums. Perhaps this is the case more in agricultural districts than in large towns, as slight mental defect is not incompatible with earning a living as an agricultural labourer. Hence the number of cases of congenital mental defect admitted to asylums is no indication of the extent of its occurrence in a population. In this connection it is of interest to quote the following from *The Family and the Nation* (16) :

“Those familiar with our country villages recognise that feeble-mindedness is especially rife in certain localities. The cross-marriages between a few neighbouring families, in which mental defects are hereditary, produce gradually a feeble-minded population. The present tendency for the abler youth of the country to drift into the town leaves the inferior stocks behind in the villages.”

Dr. Tredgold (6) found that 80 *per cent.* of persons suffering from severer grades of amentia were descendants of a pronounced neuropathic stock, and in 64 *per cent.* the heredity was in the form of insanity or epilepsy.

Epilepsy is known to be markedly subject to hereditary influence, and the ancestral form is frequently similar. Sir William Gowers (quoted by Dr. Mott) stated that cases of epilepsy with insanity in a parent are only one third the number compared with parental epilepsy. As in my cases insanity alone, occurring in ancestors, is counted, and as epilepsy in association with idiocy and imbecility is included in the congenital cases, the figure of 23 *per cent.* probably falls far short of the full amount of hereditary influence in this form.

The proportion of 14 *per cent.* in senile dementia is the smallest of all the classes. The difficulty of obtaining full information on these cases has already been mentioned, and the reasons for regarding hereditary statistics in this form of insanity as having less value than in other forms have been stated. It is probable that, as regards the next generation, transmission of any hereditary tendency would have been very slight unless it had been intensified by unsuitable marriage or by other cause.

The figures of other observers relating to this form of insanity may be mentioned:

Farquharson (8) 27.5 *per cent.*

Clouston (14) 13 „

Bevan Lewis (15) 22 „

It may reasonably be supposed that differences will occur according to the limitation of the interpretation of the term "senile dementia" by various observers.

As the majority of persons suffering from pronounced mental defect, insanity with epilepsy, or dementia præcox, remain unmarried, these forms of insanity cannot be regarded as taking a large share in the transmission of hereditary tendency from generation to generation. Perhaps their chief importance, considered collectively, is the part they constitute of the large burden which insanity lays upon the community.

The Relative Frequency of Transmission of Hereditary Influence by Father and Mother respectively.

When calculating the proportionate numbers of cases showing paternal and maternal heredity respectively, it was found that

in a small number of each sex it was not stated whether the ancestor was related to the father or mother. These cases have been divided proportionately to the other figures and added to the respective numbers according to sex, and as to whether the ancestral relationship was in the direct or collateral line.

Of the 360 cases, the hereditary influence was transmitted by the father in 142, by the mother in 114, and by both parents in 13. In ninety-one cases there was co-fraternal evidence only (brothers and sisters insane). Omitting these ninety-one cases as not indicating whether inherited liability was from paternal or maternal side, the proportions are shown in the following table :

		<i>Per cent.</i>
Cases with paternal ancestral history of insanity (direct and collateral) .	142	52·8
Cases with maternal ancestral history of insanity (direct and collateral) .	114	42·4
Cases with both paternal and maternal ancestral history of insanity (direct and collateral)	13	4·8
	<hr/>	
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Excluding cases of general paralysis, organic brain disease and senile dementia, the following figures are obtained :

		<i>per cent.</i>
Cases with paternal hereditary influence	131	53·7
„ „ maternal hereditary influence	102	41·8
„ „ both paternal and maternal hereditary influence	11	4·5
	<hr/>	
	244	

In these cases paternal transmission is seen to be considerably greater than maternal, 52·8 *per cent.* as compared with 42·4 *per cent.*, or, taking the second table, 53·7 *per cent.* as compared with 41·8 *per cent.* Statistics of different observers show some variation on this question. In an analysis of 752 instances of insanity occurring in two of a family, Dr. Mott found a much greater incidence of transmission to offspring through the female side, as shown by his figures here quoted. The difference was not wholly accounted for by the fact that there are more females than males in asylums.

Father and son	44 instances
Father and daughter	58 „
<hr/>	
	102
Mother and son	51 instances
Mother and daughter	104 „
<hr/>	
	155

Dr. Farquharson's figures show a near approach to equality, there being a very slight preponderance on the maternal side, 8.1 *per cent.* paternal to 8.2 *per cent.* maternal, taking the percentage of the total number of admissions. He quotes the following figures of other writers :

	Paternal.	Maternal.
Thurnam	8.3	8.5
Grainger Stewart	9.1	7.5
Brigham	6.7	7.7

Dr. Turner (17) found a greater maternal hereditary influence. Dr. Wigglesworth also found the maternal influence to be slightly greater, but, taking the parents only, the preponderance was on the paternal side. His conclusion may be quoted (5): "I incline therefore to the opinion that the female sex, as such, has little, if any, greater power of transmitting insanity than the male, but that the relative potency of either parent, in handing down the insane diathesis, is governed by the same laws as those which regulate prepotency in general, laws of which we are still profoundly ignorant, and which stand in urgent need of elucidation." Excluding cases where inheritance was from both parents and calculating on a basis of an equal number of males and females, I find a proportion of 56 *per cent.* with paternal hereditary influence only and 44 *per cent.* in which the influence is maternal only.

Direct and Collateral Heredity.

Considerably more of the cases show insanity in the direct line of ancestors than in collateral lines only. In the former cases there is frequently insanity in collateral lines as well. The following figures show the relative proportion of cases with direct and collateral insane ancestors.

	<i>Per cent.</i>	
Cases with insane ancestors in the direct line (including collateral lines when also present)	174	64·7
Cases with insane ancestors in collateral lines only	95	35·3
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The Comparative Susceptibility of the Sexes to Hereditary Influence.

A greater proportion of the females than of the males admitted had a family history of insanity, the figures, already stated, being as follows :

	<i>Males. Per cent.</i>		<i>Females. Per cent.</i>	
Cases with insane relatives .	151	27·4	209	36
Cases without insane relatives	400		371	
	<hr/>		<hr/>	
	551		580	

Excluding cases of general paralysis, organic brain disease, and senile dementia, the figures are : males 32·3 *per cent.*, and females 40·7 *per cent.* The greater percentage of females is in accordance with the results of other observers, previously quoted.

The numbers of male and female cases with either paternal or maternal ancestors insane, but not both, were found to be respectively 114 and 142. These are divided as follows, in regard to paternal and maternal hereditary influence.

	<i>Males. Per cent.</i>		<i>Females. Per cent.</i>	
With paternal ancestors				
insane	70	61·4	72	50·3
With maternal ancestors				
insane	44	38·6	70	49·3
	<hr/>		<hr/>	
	114		142	

This table shows that a much greater number of the males inherited from the father than from the mother while in the case of the females the numbers are approximately equal. To compare the distribution of paternal and maternal influence between the male and female offspring it is necessary to calculate on the basis of an equal number of each sex.

Taking 1,000 males and 1,000 females the above proportions give the following table :

	Paternal heredity.	Per cent.	Maternal heredity.	Per cent.	Total.
Males .	614 .	54·8	386 .	43·9	1000
Females	507 .	45·2	493 .	56·1	1000
	1121		879		2000

Hence paternal hereditary influence in these cases affected chiefly male offspring in the proportion of 54·8 *per cent.* to 45·2 *per cent.* females. Maternal hereditary influence, on the other hand, affected chiefly female offspring, the proportions being 56·1 *per cent.* females to 43·9 *per cent.* males.

The figures indicate that inherited tendency to insanity is more liable to be transmitted from mother to daughters than from father to sons, the differences in the percentages being respectively 12·2 and 9·6.

These inferences are in general agreement with those of other writers on the subject. Thus Dr. Farquharson concludes from his statistics that "insanity inherited through the father is slightly more dangerous to the sons than to the daughters, while insanity inherited through the mother is markedly more dangerous to the daughters than to the sons."

Both Dr. Turner and Dr. Wigglesworth, however, found that both paternal and maternal hereditary influence affected female offspring more than male, although the difference was greater in the case of maternal influence.

Cases with Evidence of Insanity in Brothers and Sisters only.

There were 91 cases with brothers or sisters or both insane, without a history of ancestral insanity. These have been analysed as follows :

	Brothers insane.	Sisters insane.	Brothers and sisters insane.	Total.
Males . . .	18 .	10 .	2 .	30
Females . . .	21 .	36 .	4 .	61
	39	46	6	91

By multiplying the males by two the totals are approximately equal, and the following proportions are obtained :

	With one or more brothers insane.	With one or more sisters insane.	Total.	With both brothers and sisters insane.	Total.
Males . . .	36	20	56	4	60
Females . . .	21	36	57	4	61

From these figures it may be inferred that, where two or more individuals of the same generation of a family are insane, similarity of sex is much more frequent than dissimilarity, and the proportions appear to be about the same as regards each sex. Thus, of 56 males with brothers or sisters insane, in 36, or 64·3 *per cent.*, there is a similarity of sex, and of 57 females, similarity of sex occurs in 36, or 63·1 *per cent.*

If this conclusion is considered in relation with the view that fathers transmit chiefly to sons and mothers to daughters, it may be stated that in the case of an insane son with paternal heredity or an insane daughter with maternal heredity, the other members of the family of the same sex have a greater liability to insanity than those of the opposite sex.

A Comparison between Hereditary Cases and Non-hereditary Cases as Regards the Age at which a First Attack of Insanity Occurred.

On examining the two groups of cases it appeared that a true comparison could not be made if all forms of insanity were included. Owing to the relatively greater number of manic-depressive cases in the hereditary group and of senile dementia in the non-hereditary group, a considerably greater percentage of cases begin at a comparatively early age in life in the former than in the latter group. To attempt to make a fair comparison, therefore, I have taken only cases of manic-depressive insanity, delusional insanity and dementia præcox in the two groups, excluding cases of marked congenital defect, insanity with epilepsy, general paralysis, organic brain disease and senile dementia.

To simplify the figures the cases are classified under two age-periods: (1) from fifteen years to forty-four years inclusive, and (2) forty-five years and upwards. The following table shows the relative occurrence within these two periods of life in the two groups of cases:

Age-period.	Hereditary cases. <i>Per cent.</i>		Non-hereditary cases. <i>Per cent.</i>	
15-44 years . . .	192	70·3	273	64·5
45 years and upwards .	81	29·7	150	35·5
	<hr/>		<hr/>	
	273		423	

The cases with an insane ancestral history show a somewhat greater percentage of occurrence within the earlier age-period than those without. When the two age-periods are compared it is found that 41·3 *per cent.* of those cases with first attack within the earlier period show hereditary influence, while of those cases within the later period hereditary influence is present in 35 *per cent.*

	Age-period 15-44 years. <i>Per cent.</i>		Age-period 45 years and upwards. <i>Per cent.</i>	
Hereditary cases . . .	192	41·3	81	35
Non-hereditary cases .	273	59·7	150	65
	<hr/>		<hr/>	
	465		231	

These figures suggest that insanity tends to occur in those predisposed to it by heredity at an earlier age than in those not so predisposed.

In an analysis of 730 cases of melancholia (18), Dr. Farquharson found that 20·1 *per cent.* of the hereditary cases were under thirty years of age when attacked, as compared with 16 *per cent.* of the non-hereditary cases.

These results are only what might be reasonably expected from a consideration of the causes of insanity, and will be referred to later when comparing the ages at first attack in ancestors and descendants.

Recurrence of Attack in Manic-depressive Insanity in Relation to Hereditary Influence.

The terms "recurrence" and "relapse" in reference to insanity are subject to some latitude of interpretation. Periodicity, considered in a broad sense, is observable in all forms of insanity, being a feature of normal brain function. If the meaning is limited, however, to a recurrence of an attack of insanity after a period of apparently complete recovery, it is found that the form of manic-depressive insanity includes,

practically speaking, all the cases of recurrence. This applies to the cases under present consideration, and, consequently, in making a comparison between hereditary and non-hereditary cases, this form of insanity only has been taken. The following table shows the proportion of cases in which there was a true recurrence of attack :

Hereditary Cases.

	Males.	Percentage.	Females.	Percentage.	Total.	Percentage.
Recurrent cases	27	. 31'7	54	. 40'9	81	. 37'3
Total cases	85		132		217	

Non-Hereditary Cases.

	Males.	Percentage.	Females.	Percentage.	Total.	Percentage.
Recurrent cases	40	. 26'4	74	. 39'1	114	. 33'5
Total cases	151		189		340	

By calculating the proportion of recurrent cases in relation to the total number of individuals admitted in the hereditary and non-hereditary groups respectively, the following percentage figures are obtained :

	Recurrence of attack.
Hereditary cases	22'5 <i>per cent.</i>
Non-hereditary cases	14'8 „

The greater difference in the latter figures is largely accounted for by the greater proportion of cases of senile dementia in the non-hereditary group, and the figures do not convey, I think, so correct an idea of the effect that inherited liability to insanity may have in causing an increase of the recurrent type of mental disease.

Dr. Farquharson (8) found recurrence of attack in 36'5 *per cent.* of hereditary cases, and quotes for comparison Thurnam's figure of 23'7 *per cent.* for cases of insanity in general.

In an analysis of 450 cases (19), with special reference to recurrence of attack, Dr. Kerr found this feature to be present in 25 *per cent.* of the cases of each sex in which there was a history indicating an inherited predisposition to insanity.

The above table shows that recurrence is present in 37'3 *per cent.* of hereditary cases and in 33'5 *per cent.* of non-hereditary cases.

So far as a conclusion may be legitimately drawn from these figures it would seem that the occurrence of insanity in

ancestors tends to favour the development of recurrent insanity in later generations.

It will be noticed that the difference is much less in the female cases (1·8 *per cent.*) than in the male cases (5·3 *per cent.*). The percentage of females showing recurrence of attack is much greater than that of males in each group. This is in accordance with Dr. Clouston's observations on the occurrence of periodic variations, including a tendency to alternation, periodicity of symptoms, remissions and recurring relapses. He found this tendency to occur in 46 *per cent.* of female cases and 40 *per cent.* of male cases (14).

It is of interest to calculate the percentages of recurrent cases that show hereditary predisposition to insanity. The following table, derived from the above figures, shows the proportion :

Recurrent Cases.

	Males.	Females.	Totals.
Hereditary predisposition . 27	. 54	. 81	
No Hereditary predisposition 40	. 74	. 114	
	—	—	—
Totals 67	. 128	. 195	
	—	—	—
Percentage. . . . 40·3	. 42·2	. 41·5	

The recurrent cases, therefore, show a proportion of 41·5 *per cent.* with a history of insanity in relatives. In the manic-depressive form alone it was seen that 38·6 *per cent.* had an inherited tendency to insanity. Including all forms of insanity hereditary tendency was found to occur in 31·8 *per cent.* In dementia præcox alone is there found a higher figure, 51 *per cent.* of these cases having an insane family history.

Hence it may be inferred that heredity plays an important part in the causation of the recurrent type of insanity.

This is recognised by observers who have studied this form of insanity. Dr. Bevan Lewis says, in reference to recurrent cases (15) : " They have a strongly stamped hereditary history of insanity, the parentage, when facts are procurable, revealing attacks of insanity often along both paternal and maternal lines." He states that the heredity is more often atavic than direct, and gives a proportion of 36 *per cent.* as having strongly

marked hereditary features, insanity in parents occurring in 12·5 *per cent.* only.

A Comparison between the Forms of Insanity in Ancestors and Descendants.

In nearly 200 of the 360 cases showing hereditary influence, the relatives have been received into the Bucks County Asylum, and the majority have been traced. The case-book records of these cases have been referred to with a view to comparing ancestors with descendants in relation to (1) the form of insanity and (2) the age at the onset of the first attack.

The subject was found to be too complex to admit of a statement in tabular form being made, there being too many combinations of ancestors and descendants to enable this to be done.

Certain general relations were, however, observed, tending to confirm, in a more direct way, some of the conclusions drawn from the preceding statistics. In this inquiry, near ancestors in the direct line have been considered to have had more influence than collateral relatives.

Omitting cases of co-fraternal heredity, and dealing solely with ancestral relatives, the following observations were made.

(1) The Form of Insanity in Ancestors and Descendants.

There was a great preponderance of the manic-depressive form in both ancestors and descendants. It was found that similarity of form between ancestors and descendants was nearly twice as frequent as dissimilarity. In manic-depressive cases it was observed that a distinctly maniacal or melancholic state in an ancestor was more frequently associated with a similar state in a descendant—mania with mania and melancholia with melancholia—than with the alternative state. Dr. Mott's observations (4) may be mentioned for purposes of comparison. He found in the case of 319 pairs of parents and children, that in 69 instances the children suffered from periodic insanity, and of these 40·6 *per cent.* had parents similarly affected. Of the remaining 250 children, only 16·4 *per cent.* had parents suffering from periodic insanity. In his book, *Mind and its Disorders*, Dr. Stoddart expresses the following view (20): "From observa-

tion of my own patients I am inclined to the opinion that the proportion of cases of similar heredity is in excess of its probability, and that the distinction between similar and dissimilar heredity is therefore justifiable."

The occurrence of a pronounced suicidal tendency was noted, and it was found that when this was present in the ancestors it was somewhat more frequently present in the descendants than absent. The difference was not great, however. When both ancestors and descendants suffered from manic-depressive insanity, the occurrence of a marked suicidal tendency in the latter only was comparatively rare. Slight degrees of suicidal tendency, so frequently present in manic-depressive insanity, were disregarded.

A pronounced suicidal tendency appears to be a mental feature, liable to be transmitted through several generations. Dr. Mott gives a pedigree (4) showing the occurrence of suicide or attempted suicide in four generations. The question of suggestion from antecedent knowledge tending to cause irritation is one of importance in these cases. I have noticed the occurrence of a marked suicidal tendency in several members of a family stock when inquiring into the pedigrees of some of the present cases.

(2) *The Age at Onset of the First Attack of Insanity in Ancestors and Descendants.*

A later age in ancestors than in descendants was found about four times as frequently as the converse. Although the method of calculation is necessarily somewhat inexact, so great a difference would appear to warrant the conclusion that, in general, an inherited liability to insanity tends to favour the occurrence of an attack at an earlier age than when the liability is absent, for we may apply average figures to the ancestors and assume that 60 to 70 *per cent.* would have no history of inherited tendency to insanity. Apart from the physiological stress of puberty and adolescence, the age at onset of an attack in any one case, whether hereditarily predisposed or not, would appear to be largely a matter of chance; depending upon the time at which environment happened to exert sufficient stress to produce insanity. It is reasonable to suppose, however, that, in general, the nervous system of the hereditarily predisposed

individual would be less fitted to survive so many stresses as that of one without inherited tendency, and consequently might be expected to break down at an earlier age.

The adolescent period is particularly dangerous to individuals with a strong hereditary predisposition to insanity, as is shown by the high percentage of cases of dementia præcox with an insane ancestral history.

Owing to the variety of the combinations of insane relatives, it has not been found practicable to represent in tabular form their number and degree of kinship to the patients. The following figures, however, are interesting, as showing the frequency of occurrence through several generations and also occurrence in several brothers and sisters.

In forty-eight cases unrelated to one another, insanity was found to occur through three generations, in five cases through four generations, and in three cases through five generations.

There were five families in which four members, and ten families in which three members of the same generation became insane. These were composed as follows :

Four members of the same generation insane :

4 brothers	.	.	.	.	.	.	1
3 brothers and 1 sister	.	.	.	.	.	.	2
2 brothers and 2 sisters	.	.	.	.	.	.	1
1 brother and 3 sisters	.	.	.	.	.	.	1

Three members of the same generation insane :

3 brothers	.	.	.	.	.	.	2
2 brothers and 1 sister	.	.	.	.	.	.	1
1 brother and 2 sisters	.	.	.	.	.	.	5
3 sisters	.	.	.	.	.	.	2

Some of these families show an extensive ancestral occurrence of insanity. In others there is a strong presumption of this from the number of persons admitted with the same uncommon name and coming from the same district. In these cases, however, it has not been possible to establish their relationship to one another.

Illustrative Pedigrees.

The influence of various hereditary factors in the causation of insanity is well seen by examining pedigrees of those patients in whom heredity appears from the ancestral history to act as a strong determining cause. It is not possible in most cases,

unfortunately, to obtain information showing any approach to completeness, owing mainly to the long period of time between successive generations. I have attempted to make pedigrees in some of these cases, and the examples figured, incomplete as they are, serve to illustrate some of the facts of heredity.

Pedigree I.—This shows five generations with thirteen cases of insanity. Eleven of these cases have been under treatment in the Bucks County Asylum. The tendency for sons to inherit from the father is well illustrated, only two of the thirteen cases of insanity being of the female sex. It is particularly interesting from the fact that, so far as can be ascertained, the conditions of life constituting the patient's environment appear to have been very similar in most of the cases. These have lived in the same district and have followed the same trade. A marked similarity of form of insanity is observed in ancestors and descendants.

The following brief description of the cases is taken from the case-books and partly from my own observations of five of the cases.

(1) Nothing is known of this patient beyond the fact of insanity.

(2) Admitted in 1854; a case of recurrent mania, this being his fourth attack; age on admission 45 years, age at first attack 24 years; he had one attack previous to his marriage.

Prominent symptoms.—Great excitement and restlessness with incoherence of speech, alternating with brief periods of depression lasting for a few days.

Duration.—Ten months, followed by recovery.

(3) Admitted in 1879, first attack, æt. 33; a case of acute mania.

Prominent symptoms.—Great excitement and restlessness, incoherence of speech, shouting and singing, etc.

Duration.—Ten months, followed by recovery.

(4) Admitted twice.

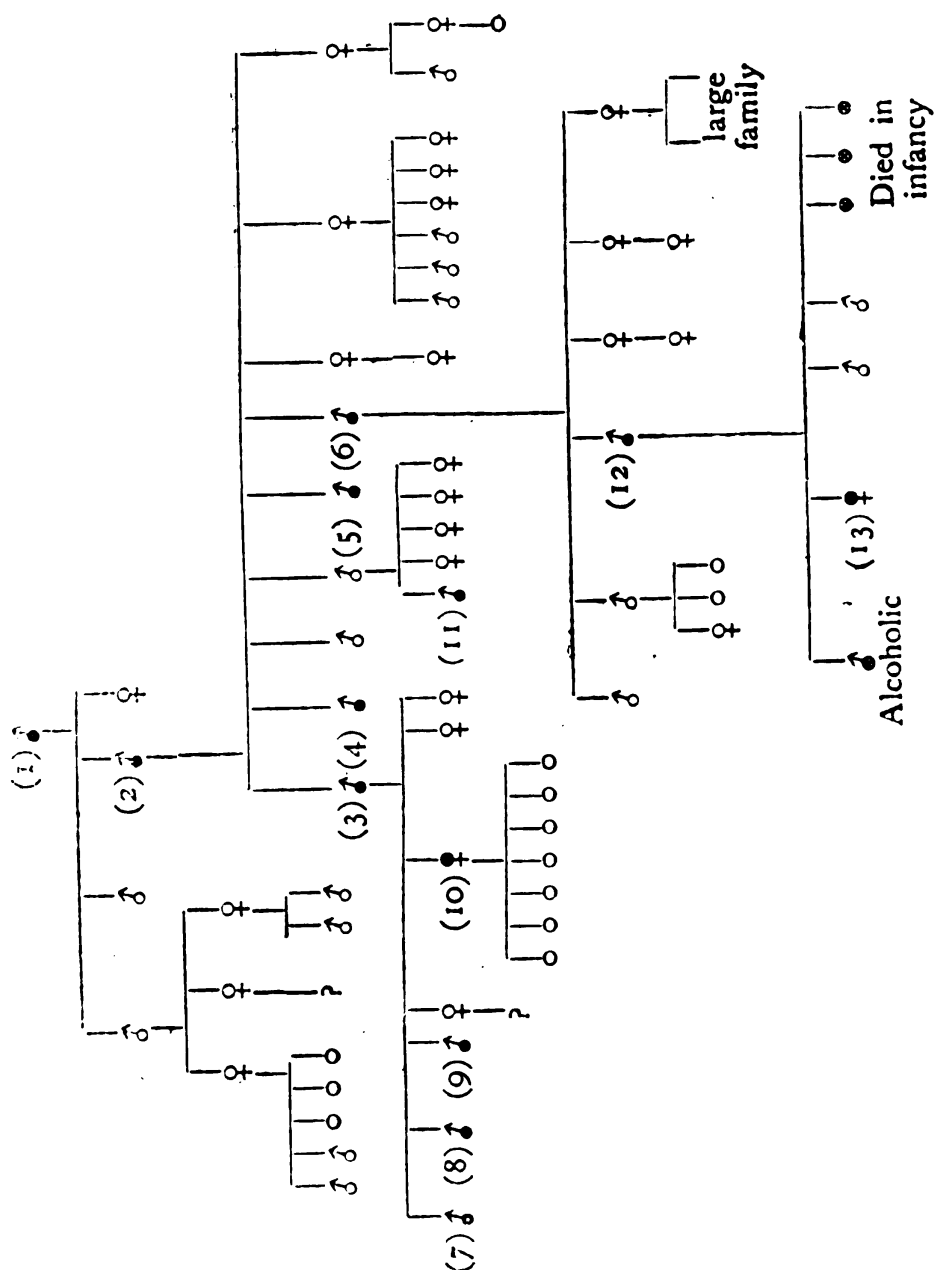
First attack 1871, æt. 19; a state of melancholia; "says his soul is lost." Previous to admission he threatened his mother with a knife; later he became less depressed, adopted absurd attitudes, and would sing silly songs.

Duration.—Ten months, followed by recovery.

Second attack, 1880; æt. 29, a state of acute mania.

Prominent symptoms.—He was greatly excited, reciting

PEDIGREE I.

*Explanation of Signs.*

A black circle indicates insanity; other mental and bodily affections are shown by a crossed circle; the sexes are denoted by the ordinary signs.

passages of scripture, tearing his clothing and shouting and singing incoherently. He showed temporary improvements followed by relapses and has gradually become demented. He has the appearance of being at least ten years older than he is.

(5) Admitted in 1867, æt. 23; first attack, a case of acute mania. He is stated to have been restless, unruly and changeable for five years previous to admission.

Prominent symptoms.—Great excitement with restlessness and violence and incoherence of speech.

Duration.—Five months, followed by recovery.

(6) This man was never certified as insane; his brother, the father of Case 11, informs me that he had several attacks of insanity but could always be managed, though with difficulty, at home.

(7) Admitted in 1892, æt. 17; first attack, a case of acute mania.

Prominent symptoms.—Great excitement with incoherent shouting and singing and tearing of clothing. He was paraplegic.

Duration.—Six months, followed by recovery.

(8) Admitted twice.

First attack, 1891, æt. 21; a case of acute mania.

Prominent symptoms.—Great excitement, restlessness, incoherence of speech, shouting and singing, etc., and tearing of clothing.

Duration.—Seven months, followed by recovery.

Second attack, 1910, æt. 40; a state of acute mania with repetition of the above symptoms.

Duration.—Two months, followed by recovery.

(9) Admitted in 1902; first attack, æt. 25; a case of acute mania.

Prominent symptoms.—Restlessness, great excitement, incoherence of speech, visual hallucinations.

Duration.—Ten months, followed by recovery.

(10) This woman was æt. 35 on admission in 1908; had been married twelve years and had had seven children. This was the first attack.

Prominent symptoms.—She is described as being dull and resistive, refusing to take food. Previous to admission she had attempted to cut her husband's throat with a razor.

Duration.—Three months, followed by recovery.

(11) Admitted in 1908; first attack, a case of acute mania, æt. 23 years.

Prominent symptoms.—Great excitement and restlessness with impulsive violence; frequent brief periods of mental improvement followed by relapses.

Duration.—Nine months, followed by recovery.

(12) Admitted in 1902, æt. 44; first attack. He had shown eccentricity for years previous to admission and there is a history of alcoholic excess.

Prominent symptoms.—Exaltation, with delusions of wealth, frequent quarrelsome moods, with varying irrational ideas. There is less excitement than in the previous cases. He is at present in the asylum as a case of chronic mania:

(13) Admitted in 1908, æt. 19; probably a case of dementia præcox, but as yet shows no dementia. Shows a strong physical resemblance to her father (12).

Prominent symptoms.—Periodic variations of mood, alternations of periods of restlessness with occasional outbreaks of impulsive violence and periods of cheerfulness and amiability. She has a brother who is given to alcoholic excess, and three or four other brothers or sisters died in infancy.

The frequent occurrence of acute mania in these cases is interesting; in most of the cases the attack appears to have had a similar course and was characterised by very similar symptoms.

The other pedigrees will be more briefly referred to.

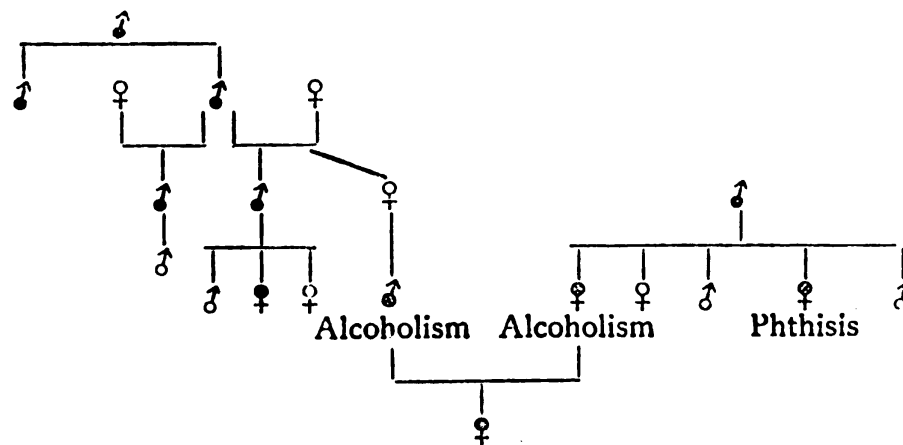
Pedigree II.—This pedigree shows, in the latest descendant, the effect of the marriage of two members of unsound stocks. On the father's side the insane hereditary influence extends to the fourth preceding generation, and on the mother's side to the second. The inherited tendency is probably intensified by alcoholism in both parents.

Pedigree III.—Maternal insane hereditary influence, accentuated by alcoholism on the father's side, is seen. One sister was insane, another suffered from chorea, and a third from epilepsy.

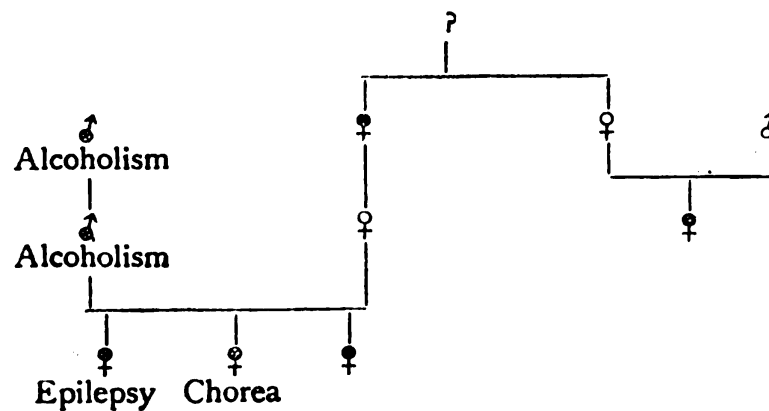
Pedigree IV.—This is very incomplete, but is interesting as showing the intermarrying of unsound families. Most of the cases of insanity were of melancholic type with a suicidal tendency. Alcoholism and phthisis also occur.

Pedigree V.—The tendency to insanity in this family is very marked, and it is unfortunate that the two branches cannot be traced farther back.

PEDIGREE II.



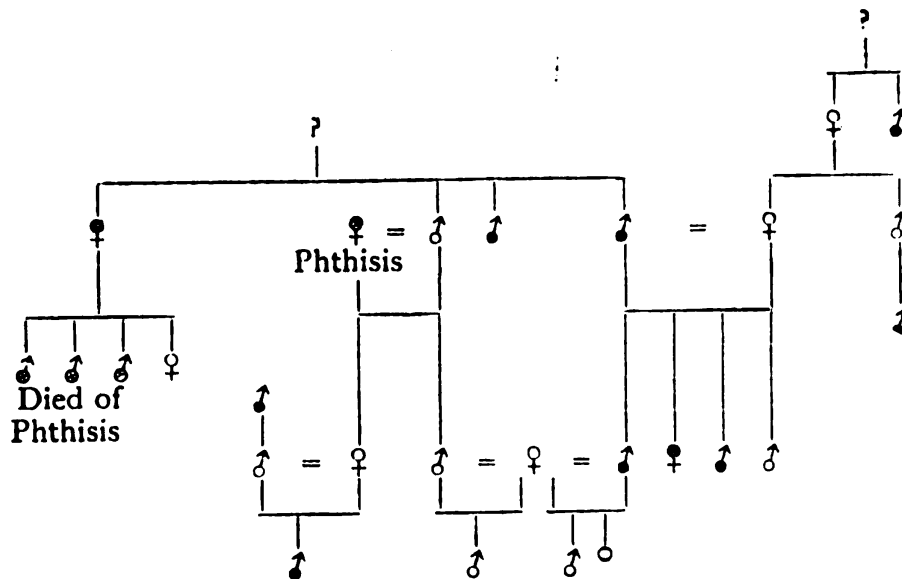
PEDIGREE III.



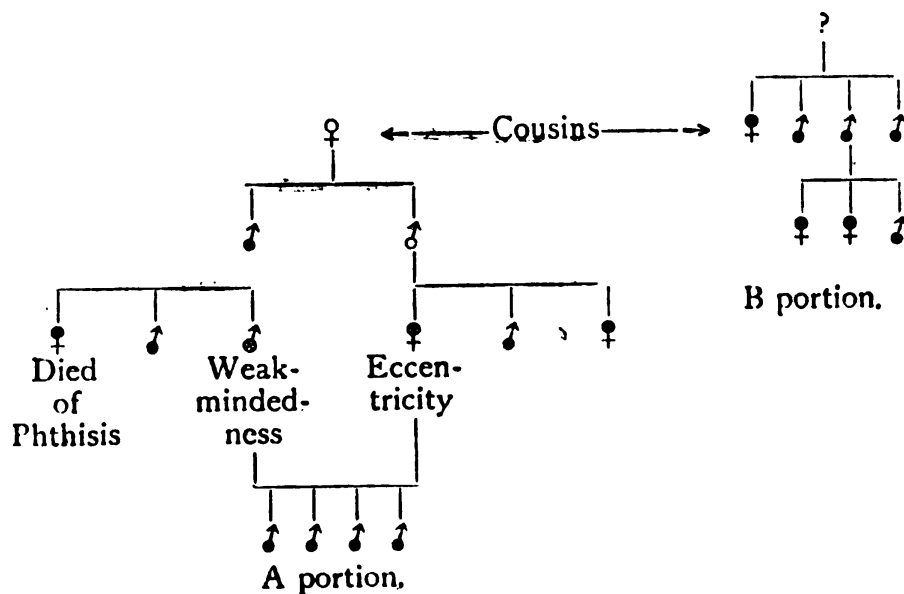
The "A" portion shows a series of manic-depressive cases with exaltation, excitement, and a curious repetition in several of the cases of the same delusion as to inheritance of property. There was, however, some slight foundation in fact for this delusion, the individuals having some blood relationship to the actual heirs.

Neither of the parents was certifiably insane, yet a strong hereditary tendency to insanity was transmitted.

PEDIGREE IV.



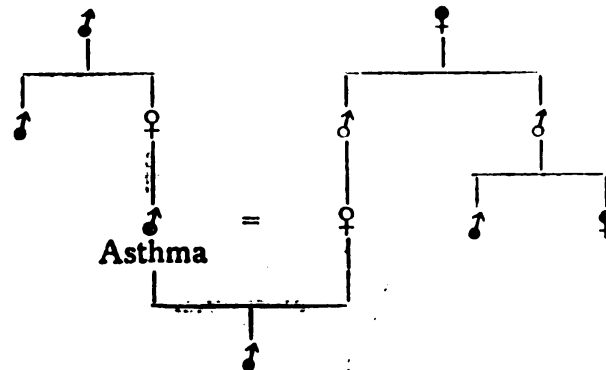
PEDIGREE V.



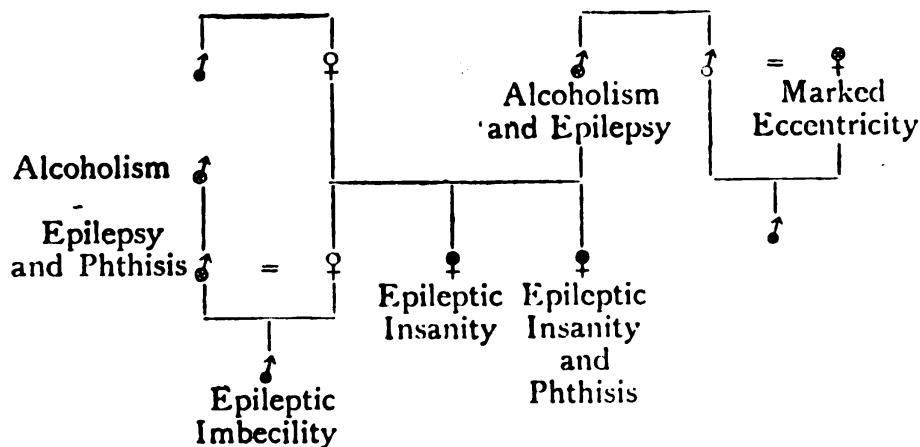
In the "B" portion the insane members were mostly suffering from melancholia with pronounced suicidal tendency.

Pedigree VI.—This pedigree of an imbecile shows insanity occurring in great-grandparents on both sides. His grandparents and parents escaped an attack of insanity, but the marriage of members of two unsound families resulted in

PEDIGREE VI.



PEDIGREE VII.



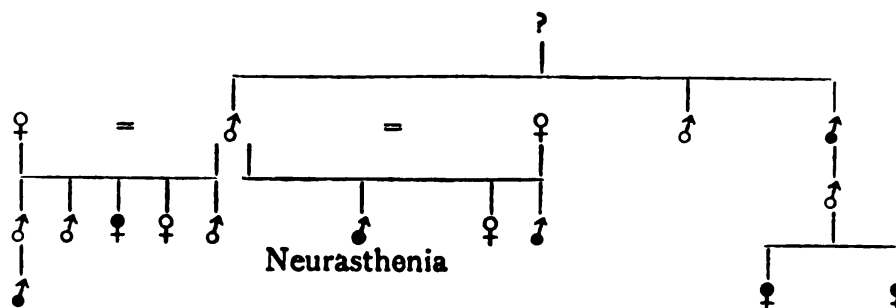
imbecility in offspring. The inherited tendency is also indicated by the occurrence of insanity in collateral relatives.

Pedigree VII.—Here the occurrence of insanity, epilepsy, alcoholism, phthisis and eccentricity in relatives of an epileptic imbecile is shown.

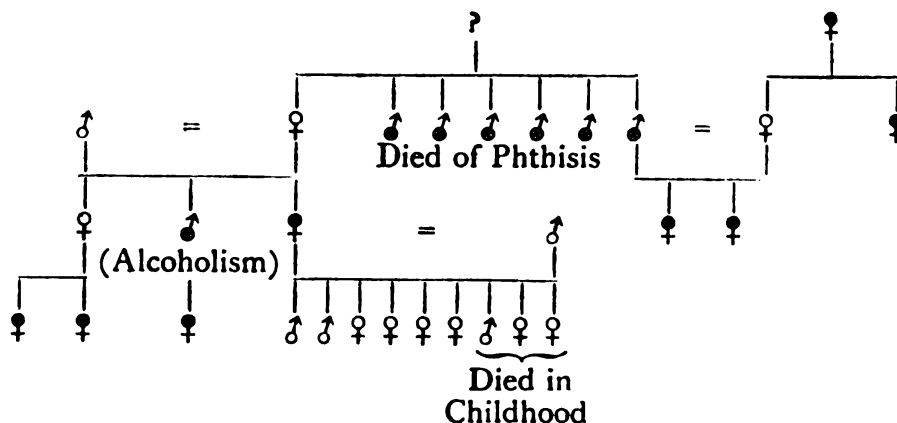
The similarity of heredity in epilepsy is well demonstrated.

Pedigree VIII.—The transmission of a latent tendency is shown. The children of both families of a man who married twice show cases of insanity although the father escaped an attack. His brother was insane, and two grand-daughters of

PEDIGREE VIII.



PEDIGREE IX.

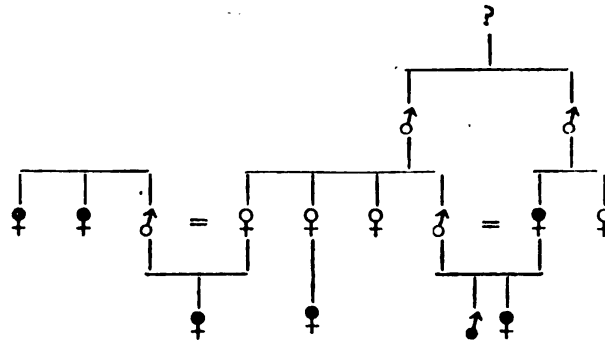


the latter are at present in this asylum suffering from dementia præcox.

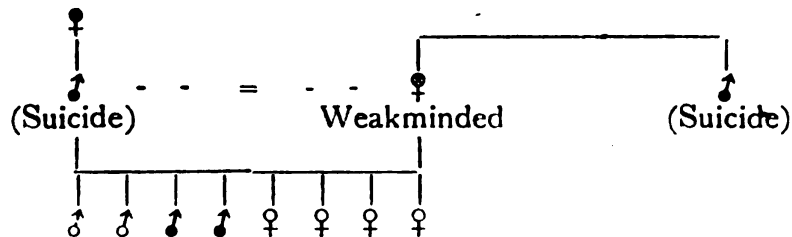
Pedigree IX.—The chief point of interest in this pedigree is the marked occurrence of phthisis associated with insanity. Out of a family of seven, six brothers died of phthisis. One of the brothers married a member of an unsound family and had

two daughters who became insane, both showing a strong suicidal tendency.

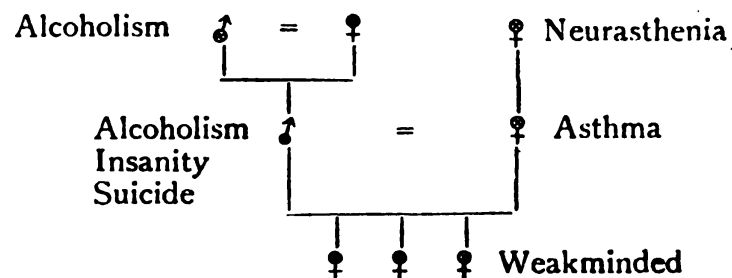
PEDIGREE X



PEDIGREE XI.



PEDIGREE XII.



The sister of the six brothers married and had a daughter insane, a son alcoholic, and three grand-daughters insane. In this family insanity appears to have affected the female sex only.

Pedigree X.—This shows a marriage of first cousins, one of whom afterwards became insane. Both children of the marriage are imbeciles. Latent tendency to insanity in the husband is indicated by the occurrence of insanity in nieces, although in one case this was largely due to an unsuitable marriage with a member of another family showing insanity.

Pedigree XI.—This is a short pedigree of two brothers, both of whom are suffering from dementia præcox. It is interesting from the fact that, in spite of the existence of an insane tendency on both paternal and maternal sides of the family, the other brothers are successful in life and the sisters show considerable mental ability, two of them having adopted the teaching profession with success.

Pedigree XII.—In this pedigree the occurrence of insanity, alcoholism and neurosis in the ancestors of two sisters suffering from dementia præcox is shown. A third sister is somewhat weak-minded.

These pedigrees represent some of the extreme cases of hereditary influence. They are given as examples because they show most clearly the influence of those affections which are generally believed to be the most important hereditary factors in the causation of insanity.

Some of the features of heredity which are shown or at least suggested by an examination of these pedigrees may be mentioned briefly as follows :

(1) The persistent transmission from generation to generation is seen in the longer pedigrees. Occasionally a generation escapes, but the tendency is transmitted as shown by the occurrence of insanity in later generations. It is questionable whether the term "latency" can be applied to such a complex group of characters as is implied when we speak of an inherited mental instability.

(2) Accentuation of the transmitted tendency, by unsuitable marriage and by the associated occurrence of alcoholism, phthisis, epilepsy and other neuroses is shown. Elimination by death from disease and by the production of marked forms of amentia is connected with this accentuation.

(3) The tendency to elimination by the contending influence of a sound parent, resulting in improvement and gradual return to normal in later generations, is also illustrated.

(4) The association of insanity with one sex to a much

greater extent than with the other is seen in some of the pedigrees. This is particularly noticeable in the first pedigree, in which eleven of the thirteen insane persons were males.

In conclusion, reference may be made to inquiries into the occurrence of psychopathic conditions in ancestors of sane persons made for the purpose of comparison with the insane. Dr. Tigges, of Düsseldorf, inquired into the history of an equal number of healthy families in connection with a study of the heredity of insane patients, and the results are stated in the review of this paper (21) to give "a solid confirmation of the views which have been reached by most experienced physicians, of the frequent transmission of insanity and nervous derangements to the descendants." Dr. Mott made a similar investigation in the case of hospital patients, and his results may be quoted (4): "In 32 pedigrees, which would include about 1,000 living representatives and 250 dead individuals, there were 8 who had been in asylums, and in 8 others fits were chronicled. In no case was either parent of the patient insane or epileptic. Two of the pedigrees furnished most of the cases."

These observations, when compared with the statistics of insane families, are a strong confirmation of the belief in the influence of heredity in the causation of insanity.

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Dr. Turner's Paper on Classification and Other Matters.

By C. MERCIER, M.D., F.R.C.P.

IN Dr. Turner's paper on the classification of insanity in the January number of the Journal occurs this passage: "It is from cases of this class" (epileptic insanity, psychasthenia, morbid obsessions, and impulse) "that subtle dialecticians seek to prove there may be disorder of conduct without disorder of mind." As I am the only person who has ever made any distinction between disorder of conduct and disorder of mind, or has ever said that the one may be disordered without disorder of the other, it is manifest that I am the subtle dialecticians referred to by Dr. Turner, and I must express to him my obligation for justifying me in the future use of the royal WE. We must point out to him, however, that after the manner and

habit of members of this Association, he attributes to Us views that We have never expressed and never held. We have, indeed, taught for many years, and iterated and reiterated, that disorder of mind may exist without disorder of conduct, and this view is again expressed in Our paper published in this Journal in October, 1910, but We have never expressed the opinion, subtle dialecticians though We may be, that disorder of conduct ever exists apart from disorder of mind. Perhaps Dr. Turner will be so good another time as to verify his references.

Dropping now the royal plural, which sits a little uneasily upon me, I will refer to some other matters that I find interesting in Dr. Turner's paper. It is twenty-two years ago since I formulated (*Sanity and Insanity*) the definition of insanity as disorder of the process of adjustment of the organism to the environment. Dr. Turner appears to have read this, or heard of it, and to have retained in his mind a hazy notion, which he now produces, I dare say quite *bond fide*, as his own, which is evidently founded on my definition, but reproduces it as the crazy occurrences of a dream reproduce our waking experiences.

"Broadly speaking" says Dr. Turner, "every individual" [he means every person, at least I suppose so, for he can scarcely intend to say, though he does say, that every individual dinner-plate, coal mine, watch-guard, etc., can be insane] "every individual whose conduct is out of harmony with his environment is insane." It is to be noticed here that Dr. Turner explicitly takes conduct as the criterion of insanity, and ignores altogether the element of mental disorder. In erecting conduct into the criterion of insanity, Dr. Turner is, I need hardly say, in my opinion, right, and I claim him as the first disciple I have made after being for twenty-two years the voice of one crying in the wilderness. But when he says that every person whose conduct is out of harmony with his environment is insane, he goes beyond my teaching, and he goes beyond the facts. The conduct of a schoolboy who "sneaks" to the master is distinctly out of harmony with his environment, a fact that is apt to be brought home to him in very unpleasant reaction of his environment on him: and yet he is not necessarily insane. The conduct of a suffragette who goes uninvited to a private party, and there assaults a Cabinet minister, is very distinctly out of harmony with her environment, but yet she is

neither considered nor treated as insane. The conduct of a welsher on a race-course is so much out of harmony with his environment that he hastens to change his environment and get with all practicable speed into another, and yet he is not regarded as insane.

Transient states of insanity, says Dr. Turner, are outside the sphere of the alienist. In Heaven's name, why? If I am called to a man who has stripped himself naked and is smashing the furniture, am I to refuse to treat him because he is "only drunk," and to-morrow, when the drink is out of him, he may be sane? If we are to treat as lunatics those only who are persistently out of harmony with their environment, then we must know, in the first place, what is meant by "persistent." In the ordinary sense of the word it would prevent us from considering any lunatic who recovers as having ever been insane at all. Incidentally we may notice that Dr. Turner has already changed his definition of insane person. It was one whose conduct is out of harmony with his environment. Now it is one who is himself out of harmony with his environment. According to this new definition, Daniel was insane as long as he was in the lion's den. A miner in an escape of choke damp is insane. A man overboard at sea is insane. An Orangeman among Irish Nationalists, or a Nationalist among Orangemen, is insane.

Dr. Turner's want of appreciation of law is as great as his want of appreciation of definition. He says "An individual" (again he means a person) "may be the subject of chronic insane delusions, but so long as he is not a source of danger to himself or to others, nor an annoyance to the community, the law has no right to control his liberty." What does Dr. Turner mean by "the law has no right"? Law, being neither a person nor a corporation, can have no rights. What Dr. Turner must be presumed to mean is "the law gives no right" to anyone to control the liberty of such a person; and if this is his meaning, he is utterly and totally wrong. The law confers upon every maker of an urgency order the right to place a lunatic forthwith under control if it is "expedient for the welfare" of the lunatic to do so; and *à fortiori* the law confers upon every judicial authority right to place a lunatic under control for the same reason. The lunatic need not be a source of danger to himself or to others, or an annoyance to the community; but if it is ex-

pedient for his own welfare that he should be detained under care and treatment, the law confers upon a proper authority the right to place him under care, and to detain him under care, in order that he may, for his own welfare, undergo treatment.

Dr. Turner adds to his definition of certifiable insanity that the conduct of the lunatic must be "owing to disease." This would shut out and prevent us from certifying not only every congenital idiot and imbecile, but every lunatic whose lunacy was partly or wholly due to inherited predisposition, or it would need a modification of the meaning of "disease."

The definitions of insanity and of certifiable insanity are so utterly and hopelessly wrong, that our anticipations of the classification that is to be founded on them are not very high, but before he enters on classification Dr. Turner has further general observations to make.

"All physiological observations and experiments tend to show that each of the highest nervous centres represents every part of the organism, some parts in greater, some in less, degree, some more directly, others more indirectly." If there are, in fact, any physiological observations or experiments that tend to show the truth of this doctrine I should be glad to hear of them. Dr. Turner states it as if it were his own discovery, but I first learnt the doctrine forty years ago from Hughlings-Jackson, and have often referred to it since, but I never heard him claim that it rested on physiological observations or experiments. He taught it as a pure speculation.

Dr. Turner states that when nerve-cells are discharged—he should rather say discharge—their molecular constitution is disturbed and a more stable nervous substance is formed, which requires a stronger stimulus for its discharge. And the converse—Dr. Turner means the obverse—of this is also true, that the longer the nerve-cells have been left undischarged the slighter is the stimulus required to discharge them. All very true, and first taught in my *Nervous System and the Mind* some five and twenty years ago, but it has not the slightest bearing on Dr. Turner's classification.

Dr. Turner endorses Dr. Bolton's assertion that the lunatic is born and not made, in the sense that it is not possible for a person to become insane in default of a certain amount of structural deficiency in the manufacture of his brain. It is news

to me that brains are manufactured. No doubt Dr. Turner can tell us where the factory is situated and how many hands are employed in the manufacture. In all cases in which insanity is produced by poison, the mental disorder—it will be noticed that the definition of insanity is again altered and is now given in terms of mind—disappears as soon as the noxious agent is got rid of. Does it? Does “persistent” insanity never follow influenza or typhoid fever?

Now for Dr. Turner’s classification. He has already, as far as I can make out, excluded from insanity all cases of “gross lesions, as injuries, tumours, or such like,” yet one of his two primary classes is the “traumatic or accidental.”

The other of his primary classes consists of “the idiopathic, or those hereditarily predisposed,” and is divided into three sub-classes.

The first sub-class consists of the imbeciles, in whom the structural defect is of such a degree that the nervous system is incapable, at the outset of life, of performing its functions in an efficient or normal manner. So that insanity, which was first to be estimated by conduct, and then by mind, is now to be estimated by the manner in which the nervous system performs its functions—by the state of the reflexes, *inter alia*, I suppose.

“The second class is formed of those whose structural defect is of such a degree that, although their brain is capable up to a certain point of performing its functions efficiently, yet it is incapable of withstanding the physiological and inevitable stresses of life.” As this second class is composed of those whose brain is capable up to a certain point of performing its functions efficiently, two consequences follow. In the first place these unfortunate people have only one brain between them. I know not how many they are, but since they include all the cases of dementia præcox in the world, they must be very numerous. Is it any wonder that these unfortunate beings, with only a small fraction of a brain a-piece, are unable to withstand the physiological and inevitable stresses of life?

In the second place, since they are distinguished from the first class by the fact that their brain is capable up to a certain point of performing its functions efficiently, it follows that the brain or brains of those in the first class is, or are, not capable up to a certain point of performing its, or their, functions

efficiently. In other words, the brain or brains of the persons in the first class cannot perform any functions at all. They are practically without brains. They are, as far as function goes, acephalous monsters. This is not the usual concept of an imbecile. •

The third class comprises all those who are able to withstand the ordinary physiological stresses, but break down when opposed to the influence of adventitious unfavourable circumstances, or with advanced age. It is clear, therefore, that in Dr. Turner's opinion, old age is not a physiological or inevitable stress. Inevitable, in one sense, it is not; for any one can avoid it by committing suicide in youth; but that old age is a pathological stress is new to me.

Dr. Turner then goes on to lay stress upon the importance of recognising both the internal factor and the external factor, or, as he calls them, the intrinsic factor and the extrinsic factor, in the causation of insanity, and says that they are in inverse proportion. This relative interdependence of intrinsic and extrinsic factors is, he says, a fundamental point in the schemes of classification of Tansi and J. S. Bolton. He might have added, if his reading had extended so far, that it was a fundamental feature in the scheme of causation of insanity formulated by C. A. Mercier when Tansi and J. S. Bolton were boys at school.

Dr. Turner's second class is composed entirely of cases of dementia præcox. I am always interested in this mysterious disease, which no one has yet been able to define or to describe in such terms as to distinguish it from other forms of insanity, and therefore I turned to Dr. Turner's description with attention; but I have so often been disappointed in my hope of hearing something definite or tangible about it that my anticipation was not pitched very high, and it was well it was not, for I should only have been disappointed again.

It appears from Dr. Turner's description that insanity of his first class—imbecility—"may simulate dementia præcox in all its forms." It appears also that cases of insanity of his third class—acquired insanity—may resemble cases of dementia præcox so closely that it is "impossible to differentiate them clinically." *Primâ facie*, a classification whose classes cannot be distinguished from one another is not a very serviceable classification, and it appears that Dr. Turner's three classes

cannot be clinically distinguished from one another, a peculiarity that I anticipated as soon as I found that one of the classes was dementia præcox. To do Dr. Turner justice, however, he does not leave us entirely without guidance. Although cases of "acquired insanity" resemble cases of dementia præcox so closely that "very often it may be impossible to differentiate them clinically," yet the cases of mimetic "acquired insanity" have "much better prospects" of "making a serviceable recovery" than they would have if they were cases of dementia præcox. Dr. Turner does not say that the cases of acquired insanity recover and the cases of dementia præcox do not. If this were so, we could sometimes make a diagnosis, if only on the *post-mortem* table. No. Cases of acquired insanity have a much better chance of making a serviceable recovery than cases of dementia præcox. Dr. Turner does not say that no case of dementia præcox ever recovers; on the contrary, on p. 18, he says that there are a number which improve and make serviceable recoveries. Nor does he say that every case of acquired insanity recovers, but only that they have a better chance of making a serviceable recovery. So that we are arrived at this conclusion—that the only means of distinguishing between dementia præcox and acquired insanity is that in acquired insanity some recover but others do not, while in dementia præcox some do not recover but others do; truly an exquisite piece of fooling.

Imbeciles also may, according to Dr. Turner, simulate the symptoms of dementia præcox. How are we to distinguish the one from the other? Dr. Turner does not tell us. Whether imbeciles also include, in Dr. Turner's estimation, recoverable cases, he does not tell us. If they do, they are in this respect indistinguishable from both dementia præcox and acquired insanity. If they don't, we may know with certainty that a case that recovers is not a case of imbecility, and thus we arrive at the first instance in which we can discover a rudiment of use or value in the classification. But our satisfaction, small as it is, is short lived. When we refer to the definition, we find that insanity is not insanity unless it persists. But if the patient recovers, his insanity does not persist, and therefore he never was insane at all.

I wish to be quite fair to Dr. Turner and the Kraepelinites, and therefore I must point out that while the transient insanity

that he does not regard as insanity is that in which the patient "returns to a normal frame of mind," the recovery from acquired insanity and from dementia præcox is "serviceable recovery." Whether Dr. Turner means to make a distinction between the two, whether return to a normal frame of mind is an unserviceable recovery, what the difference is between a serviceable and an unserviceable recovery, and what the nature of an unserviceable recovery is, I do not know, and Dr. Turner does not enlighten us.

So much for the distinction between dementia præcox on the one hand and acquired insanity and imbecility on the other. Now for the varieties of dementia præcox. The state in which the classification of these varieties is can only be adequately described as a state of mush. No one authority agrees with any other as to what the varieties are, how they are characterised, or what are their boundaries. Dr. Turner gives Kraepelin's division into the katatonic, the hebephrenic, and the paranoidal groups, and as far as one can make out, it appears that he adopts them. Katatonia, he says, is a well-marked group, but all cases are apt to take on katatonic characteristics at some time or other in their course, and, "as Tansi remarks, 'In all cases of dementia præcox, whatever the clinical variety to which they belong, absurdity of behaviour spreads a shadow of katatonia beyond the limit of the katatonic variety.'" This is Dr. Turner's notion of "a well-marked group." The hebephrenic variety, in Dr. Turner's opinion, "at present seems very much in the nature of a rubbish-heap, wherein to throw cases that do not readily conform to the two other types." This, then, is, I suppose, also "a well-marked group." The paranoidal group consists of those who have unsystematised delusions. Since the characteristic feature of paranoia is the existence of systematised delusion, the attachment of the name paranoidal to those whose delusions are unsystematised strikes one as so peculiarly inappropriate that it needed a Kraepelin to hit upon it. Moreover, since unsystematised delusions are pretty frequent in combination with katatonia, and since any case, whether with unsystematised delusions or not, may be called hebephrenia, I should agree with Dr. Turner when he says, "It will be gathered that the subdivisions of dementia præcox are not very satisfactory." Yes, I think it will. Indeed, I would go further, and suggest that "it will be

gathered" that the divisions among the forms of dementia præcox are in a state of mush ; that the concept of dementia præcox itself is in a state of mush ; that the whole notion of dementia præcox has all the definiteness of outline and architectonic precision of a par-boiled batter pudding.

Dr. Turner says that the opponents of Kraepelin are a rapidly decreasing minority. They may be, but I trust Dr. Turner will allow that they have some kick left in them ; and the fact, if it be a fact, that they are in a minority is evidence, as far as it goes, that they are right, for it is a maxim whose truth is proved by long and universal experience that the majority is always wrong. Dr. Turner says that Sir Thos. Clouston, in his account of adolescent insanity, comes very near to Kraepelin. There is only one word that will properly characterise this statement — it is impudent. Sir Thos. Clouston described adolescent insanity, and described it admirably and for the first time, if not before Kraepelin was born, yet long years before Kraepelin described anything. Kraepelin took Sir Thos. Clouston's description ; muddled it ; spoilt it by the addition of cases foreign to adolescent insanity ; gave a new name to it ; and posed as the discoverer of a new disease ; and men like Dr. Turner, whose capacity of thinking clearly, and the value of whose opinion can be gathered from this analysis of his classification, fall down and worship the plagiarist, and speak with patronising superiority of Sir Thos. Clouston, the latchet of whose shoes they are not worthy to unloose. Dr. Turner writes vaguely about " the essential identity between this phase and the various other phases of this protean disorder," about " their significance and inter-relationship "—empty words, which he does not explain, and which I venture to say he cannot explain.

Dr. Turner's third group consists of the " acquired insanities." He admits that these, or some of them, cannot be distinguished by their symptoms from cases of dementia præcox. The only difference between them and dementia præcox is that in them the prognosis is more favourable. Prognosis is not a thing that can be observed. It is a pure guess ; and the distinction between acquired insanity and dementia præcox is pure guess-work. It is not even as if the prognosis in dementia præcox was uniformly bad, and that in acquired insanity uniformly good. If it were so the distinction would be worthless. But

it is not even worth as much as this. The distinction is that in the one the prognosis is better than in the other. What does this mean? Is it better in every case, or good in a larger proportion of cases? And who is the arbiter? If one observer gives to a case a good prognosis and another a bad prognosis, is that case "acquired insanity," or is it dementia præcox? It seems to me that Dr. Turner would have an equally good criterion if he called those cases acquired insanity that have a good chance of going to heaven, and those cases dementia præcox that have a good chance of going to hell.

Among acquired insanities Dr. Turner includes morbid obsessions. (Why morbid? Is there a normal obsession?) In fact, the victims of obsession are very rarely insane. "They may have delusive ideas which they recognise as such." Then they are not delusive, for they do not delude. "And they may even take steps (often, however, ludicrously inadequate) to prevent their impulses from taking effect." Victims of obsession and impulse very rarely need to take any steps to prevent themselves from acting on their obsessions or impulses. In the great majority of cases such persons have enough self-control to render such steps needless. But when they do take steps they usually take very effectual steps. They give themselves up to the police, or they go into asylums, or they mechanically restrain themselves.

Dr. Turner's second great class is called by him Traumatic insanity, and he says it does not need extended discussion. I am not so sure about that. "It includes all cases of insanity arising from gross lesions of the brain." Dr. Turner does not seem to know what is meant by a gross lesion of the brain. The term was invented by Hughlings-Jackson to characterise macroscopic lesions, such as tumour, hæmorrhage and laceration, and to distinguish them from microscopic lesions. Dr. Turner applies it to excessive proliferation of the neuroglia, which is a microscopic lesion. Nor does Dr. Turner seem to know the meaning of "traumatic." It is derived from *trauma*, and has always hitherto been used in medicine to mean the product of a wound, or of the application of violence from without. Dr. Turner includes in his traumatic insanity, tumour, amaurotic idiocy, and gliosis, for whose traumatic origin there is not a vestige of evidence.

A good many years ago I suggested that the terms "idiocy "

and "imbecility," which were then used rather at haphazard, but generally to mean a greater and a less degree respectively of intellectual defect, should be more strictly defined, and that idiocy should be applied to persons who, by reason of mental defect existing from birth or from an early age, were incapable of acquiring those direct self-conservative activities, the want of which in young children prevents us from leaving them alone ; while imbecility should be applied to those who are capable of exercising these activities, but are unable, from congenital mental defect, to earn their own living. These definitions were accepted by the Royal College of Physicians, and, at the instance of the College, by the Royal Commission on the Care and Control of the Feeble-minded. I have always taught that both idiocy and imbecility might have one of two origins. They might be due to sheer lack of developmental impetus, so that the process of development ceased prematurely before the brain was complete ; or they might be due to some quasi-accidental agency, such as injury to the head, or meningitis, acting in early youth on a brain that, but for such accident, would have developed normally. Now it appears that Tansi makes the primary division according to the mode of origin, and the secondary division according to the degree of the defect, instead of *vice-versâ*. This trumpery alteration, if it does no good, does no harm ; but as it is an innovation, and as it is made by a foreigner, Dr. Turner, of course, in his anxiety to be up-to-date, adopts it. Unfortunately the innovation does not stop here. The soaring ambition of the modern alienist is never content until he has altered the names of things. Not until he has given a new name to an old thing, as in the case of dementia præcox, and manic-depressive insanity, or until he has shifted about the familiar names of familiar things, is he hailed as a great discoverer ; but when this is done his fame is secure. Therefore the genetous idiot and imbecile of Bucknill and Tuke are dubbed imbecile, and the accidental idiot and imbecile are called idiots, and the claim of Tansi to be a great discoverer is secure, at least among the logolaters, of whom the rising generation of alienists in this country appears mainly to consist.

I have dealt with Dr. Turner's paper at greater length than it deserved, not because it is itself important, but because it fairly represents a class. A large proportion, perhaps a

majority, of the younger alienists in this country—the country of the Tukes and of Conolly, of Locke and Berkeley and Hume, of Hughlings-Jackson and Clouston and Savage—are so bitten with the anti-patriotic bias, that they can see no merit in the most momentous discoveries of their own countrymen, of whose achievements they are for the most part ignorant, and whose books they do not trouble to read ; and they hail every twopenny-halfpenny innovation, even though it is only a change of name, that comes from the Continent, as a discovery to which the discovery of gravitation, of combining proportion, of natural selection, or of aseptic surgery is a bagatelle, and of no importance. When I looked back on the splendid roll of eminent Englishmen, I used to feel proud of my country ; but now when I look around me and see a shoal of small fry engaged in belittling their compatriots and belauding the foreigner with fulsome and undeserved adulation, I take shame to myself to belong to such a crew. Perhaps this exposure of the utter confusion of thought that underlies this attitude, a confusion that cannot be paralleled except in the slipshod character of the English in which it is expressed, may induce those of this school that are capable of thought to consider whether after all a change of name is necessarily a great discovery, and whether it is not worth while to pay attention to things as well as to the names of things.

Comments on Dr. Mercier's Criticisms of Dr. John Turner's Paper on Classification. By JOHN TURNER, M.B.

THROUGH the kindness of the Editors I have been given the opportunity of reading Dr. Mercier's diatribe on a paper I published in the last number of the Journal.

He points out in that courteous and temperate manner so characteristic of him, and which has served to render him so justly popular in debate, what he considers to be slips in grammar, illogical and contradictory statements, acts of plagiarism, and other offences against good sense and good taste, of which latter he should be a good judge.

Why all this bother and unbottling of spleen on a paper so unworthy of his notice? He says it is because it is representa-

tive of a class "numbering perhaps a majority of the younger alienists in this country." But from the whole tenor of the article, it seems that his object is not to point out my deficiencies, but to draw attention to his own slighted merits.

Dr. Mercier accuses me of impudence. What term, I wonder, should be applied to one who writes as follows? "'Broadly speaking,' says Dr. Turner, 'every individual' [he means every person; at least I suppose so, for he can scarcely intend to say, though he does say, that every individual dinner-plate," etc., etc.].

If Dr. Mercier will turn to *Murray's Oxford Dictionary* he will discover that one of the definitions of individual is "a single person" (I suppose the immaculate Dr. Mercier would cavil at this as not including a married person). Are we to take Dr. Mercier, then, not only as the sole source of all that is worth knowing in psychiatry, but as our authority in style and grammar? Heaven forbid!

The whole article by its intemperate language defeats its intention, whether that is to wither me or belaud himself.

The Medical Examination of Backward Children in Schools. By JOHN FORTUNE, M.D.Edin., D.P.H.Oxford, M.P.C., Assistant M.O.H. Ipswich, formerly Senior Assistant Medical Officer, Devon County Asylum.

WE are apt to consider that, as the object of medical examination of school-children is the improvement of the national physique, such an object is already brought much nearer by the adoption of medical inspection. That it can only be reached through the individual and that these individuals are not responsible for their condition is apt to be overlooked, as is also the necessity for educating that part of the population responsible for the children in the various factors concerned in deterioration. At present the majority of children have parents uninterested in the means adopted in their education—they are at school, *ergo*, they will be educated; they have a physical instructor, a hygiene teacher, and now a school doctor, *ergo*, they will be made healthy or kept healthy.

As yet methods of treatment have been divorced in most

places from medical inspection, but there are signs that this separation is not likely to be permanent. It is fortunate that medical men from their training are taught to consider patients and not diseases, as the stereotyping of work is apt to stereotype the modes of thought. In officials whose reports must always include classifications, the mind is apt to be captured by the words or names, and the tendency to generalisation is readily acquired. Even in an age when socialistic measures are no longer looked at askance because they are socialistic, there is evidence of this tendency to generalisation in all directions wherever individuals can be classified by any common characteristic.

The name-word for the mass holds the imagination to the exclusion of the consideration of the unit. One is ready to talk of mankind while forgetting that it takes all kinds of men to make this world.

Contemporary literature teems with examples of this attitude of mind ; and it is largely the result of slovenliness, and not a desire for precision of thought, such as animates the official making his reports. The desire for amusement and mental recreation, which is at present so widespread, and which exhibits itself in the thronged enclosures of playing-fields and the crowded picture-houses, has encroached on the method of written expression. And a glib phrase of wide meaning is readily seized on as a stimulant to a jaded imagination. It enables one to "talk big." A classification embracing many units is one of the easiest methods of obtaining such an effect, and makes a ready appeal in these days, when to most the daily round is monotony. And so the method of expression which is used to obtain lucidity is also used to arrest attention regardless of exactitude, and the servant becomes the master of the intellect.

This danger is not confined to the general public whose reading is not related to their daily avocation ; it is in danger of extending into more technical courses, wherever, in fact, men find that a generalisation will result in arresting attention by a phrase, where a more accurate statement would prove bald and unimposing, and probably pass unobserved.

Even medical men, in spite of their training, are at times captured by the generalisation. A discussion on standard bread in a daily paper can be rivalled by a discussion on

dispensary tuberculin treatment for consumptives, and the policy of secrecy in foreign affairs capped by the mode of dealing with the unfit. The requirements of the unit as a distinct unit are conveniently overlooked, much as the sorrow of the bereaved in the triumph of a great battle. But the battle could not have been won save by the soldiers.

It is with such reservations that one must approach the examination of mentally backward children. As a rule the medical inspector will have the children's names given him by the teacher. A child does not come up to the level of the class, and so is classified as backward. This preliminary definition must of course be elastic and varies with the teacher. In some schools a large percentage of the children are stated to be above the average mentally, in others the tendency is to consider them below average. The teacher's previous experience will have some effect on his or her present judgment. Nevertheless, in making an inquiry into the prevalence of backwardness and feeble-mindedness amongst school-children, the first step may be safely left to the teachers.

Abroad, attempts have been made to discover a simple series of tests which may be readily used to detect a degree of mental deficiency. If such a formula could be relied upon most of the examination could be left to the teacher, who would readily learn the rationale, and the medical inspector's province would be the classification of the type or degree of mental defect.

On the other hand, in various parts of this country the examination is of a very thorough type, and the excellent scheme of examination described by Dr. Steward (1) is an example. In carrying out an investigation in the Ipswich schools, at the instigation of the M.O.H., I devoted most attention to the question of the classification with a view to further action in the way of treatment, that is, the suitability of the child for instruction—

(a) In an ordinary school.

(b) In special schools, where the training is of the manual description adapted for children of feeble intellect, or those deprived of any of the special senses.

It was also sought to discover those whose ultimate fate was to be segregation in an institution, as being unlikely to benefit by instruction. As the purpose of the inquiry was of this

practical nature, and as it required to be executed within a limited period, copies of the card appended were distributed amongst the various schools. The object of inserting printed words which could be deleted was to ensure uniformity in the part of the report entered by the teachers, and also to avoid omission in the more physical part of the medical examination. The avoidance of finality of diagnosis at a single examination is provided for by the space left for a report on the progress of the large class (*a*) or certain of those (*b*) where the defect amounted to feeble-mindedness. The children to be removed to institutions must of course pass from observation.

Whilst admitting the immense value of previous asylum experience and of contact with various forms of imbecility, I found that experience of the healthy child's mind was of much more actual value in the mental examination. The number of cases where the defect was so marked as to be classified by any of the types of feeble-mindedness or imbecility was comparatively small. After excluding the cases where no defect of intellect could be found, I was left with 112 cases out of a school population of 12,000.

Microcephalic	2	Epileptic (not mentally	
Mongol	1	deficient).	7
Scaphocephalic	4	„ (mentally defi-	
Paralytic	2	cient).	6
Infantilism	1	Simple congenital feeble-	
Neurasthenia	1	minded	35
Deprivation of special senses	7	Backward	45
Word-blind	1		

The group defined as "simple congenital" were all of the degree requiring instruction in special schools, while those defined as "backward" were marked to remain at ordinary schools for observation and repeated examination. As each school in Ipswich is visited by the medical inspector every three weeks there is ample facility for repeated observation. This is of vital importance where easily remediable physical defects are found, *e.g.*, deafness associated with enlarged tonsils and adenoids, defective vision due to refraction errors, or to ciliary spasm, the presence of malnutrition, etc. Owing to the excellent accommodative power of childhood, there is no doubt that many cases of astigmatism have been hitherto overlooked in school-children. As the correction of refraction errors is

part of the duty of the medical inspector in Ipswich, I have been astonished at the prevalence of hypermetropic astigmatism and the frequency of ciliary spasm amongst school-children. In ordinary routine examination over 16 *per cent.* of all school-children have been found to have some refractive error, and the commonest variety of all is hypermetropic astigmatism. As regards ciliary spasm, this is often the result of illness or malnutrition, and can only be detected by retinoscopy. Much apparent backwardness is corrected by finding a suitable place in his class for the child whose defect in hearing or in vision is slight, and more by an operation on the throat or by the provision of spectacles where these procedures are found to be necessary. As to the results of manual training, I have not sufficient experience to speak authoritatively ; but it is full of promise in the cases adapted for such education. There are many obvious drawbacks in keeping a child of ten or eleven in an infant department because of his intellectual inferiority, and to place him in an upper standard among his equals in age is unfair both to the child and to his teacher. Nowhere, in my opinion, is attention to the individual more repaid than it is in the consideration of this question of the mode of dealing with the backward child. They are a collection of units which must be treated by a study of their individual needs.

Out of the total of 112 children who were definitely behind others of their age in mental capacity, 54 were of such a character as to require other than ordinary school attendance for the education, and 58 were marked as fit subjects for further observation in ordinary schools. Six epileptic children were included in the latter group, and 7 in the former. Excluding the epileptics, this leaves 52A and 47B, as classified in the card.

The 52A consisted of 26 males and 26 females, the 47B of 28 males and 19 females. The epileptics consisted of 2 males and 4 females in A group and 5 males and 2 females in B group. The proportion of mental deficiency is thus more marked in boys than in girls as far as this inquiry goes, but the figures are too small to permit of any accurate deductions. I wish, however, to refer to the question of stigmata, which is a physical characteristic not affected by any personal factor in the making of the examination. Out of these 112 children of less than average mentality, 78 showed

deformity of the palate, including 1 cleft palate, 10 had Morel ears, 7 showed the Darwinian tubercle on the ear, 6 had markedly large and 2 markedly small ears, and 6 had asymmetrical ears. Strabismus was present in 14 cases, and fissured tongue in 13 cases. In 4 children the thyroid was large, and in 4 also the condition of epicanthus was present. One case only showed decided asymmetry of the head. As regards the crown of the head, in 27 children this was eccentric, 12 showing the crown to the right, 8 to the left, and 7 exhibiting a double crown. In 1 case only the teeth were presented in a double row, and in 44 cases the little fingers of the hands were unduly short and incurved. From the observation of many normal children I am inclined to attach most importance to the last, the incurving along with shortness of the little fingers, as a stigma of degeneration. In the examination of several thousands I have never found this to reach 10 *per cent.*, which figure also exceeds the percentage of deformed palate. But eccentric crowns of the hair are just as common amongst normal as in the abnormal children referred to in this article. The existence in 12 *per cent.* of strabismus requires special notice. Accommodation and convergence go together, and exceptional demand on accommodation is apt to result in strabismus in children. The percentage of strabismus in 4,000 school-children examined is only 2.5. It has to be borne in mind that it is only in recent years that attempts to ascertain the visual acuity of the child of school age have been made. Also that education is compulsory, but the efficient lighting of schools is not so. One must infer that undoubtedly damage has been done in many instances to children by their compulsory instruction in badly lighted schools.

There is one truism which the school inspector carries with him—that the child is father of the man—and there is another which the asylum physician bears in mind—that many forms of mental aberration have a physical basis. In the examination of mentally defective children one has to remember both. Also the duties of a medical official are apt to become monotonous whenever he forgets the predominance of the individual case over the type of disease. While it is with the mental examination that the interest of the school medical officer with an asylum training must surely lie, it is, on the other hand, on a careful physical examination that he must rely for a ready

detection of the means to amelioration. It is with an emphasis to this view that I submit the results of this investigation. I must express my obligation to Dr. A. M. N. Pringle, the M.O.H. for Ipswich, for much valued advice and for permission to publish. That I have not elaborated the mental examination is due to the fact that it is in physical, not mental, conditions that the greatest hope lies for improving backward children, and the results of repeated examinations have convinced me that faulty nutrition and *compulsory* education of children without a standardisation of the child's and the school's conditions are largely responsible for the existence of "backwardness."

MENTALLY ENFEEBLED OR EPILEPTIC.

[This side to be filled in by Teacher up to No. XV.]

Delete terms where necessary.

- I. Name :—
(Surname first.)
II. Date of Birth :— Address :—
III. School :— Age :—
IV. Education Authority :— Standard :—
V. Height :— General Health :— Epileptic :—
VI. Intelligence :—(a) Attention
(b) Memory
(c) Reading
(d) Writing
(e) Arithmetic
VII. Receptivity for Instruction :— Poor. Negligible.
VIII. Habits :—Careless. Mischievous. Quarrelsome. Lazy. Deceitful.
Dirty. Cruel. Well-behaved.
IX. Temperament :—Apathetic. Nervous. Emotional. Stubborn.
Anxious.
X. Morals :—
XI. Home Circumstances :—Comfortable. Overcrowded. Poverty.
XII. Attendance at School :— Underfed. Illegitimate.
XIII. Number in Family :— Place in Family :—
XIV. Progress at School :—
XV. Date :— Teacher's Initials :—
XVI. Mental Examination :—

- I. Heredity :—1, Tuberculosis. 2, Alcohol. 3, Insanity. 4, Epilepsy.
5, Feeble-minded. 6,
II. Suggested Cause :—
III. Physical Disease :— Deformities :—1, Congenital.
IV. Nutrition :— 2, Pathological.
V. Attitude :— Gait :— Expression :—
VI. Head :—Asymmetry Shape. Circumference.
Antero-posterior. Transverse.
VII. Stigmata :—Palate. Teeth. Tongue. Lips.
Ears. Eyes. Crown. Fingers.
VIII. Thyroid :—
IX. Special Senses :—
X. Nerve Signs :—Face Twitchings. Invol. Movements. Nystagmus.
Inco-ordination. Hand-balance. Reflexes. Pupils.

- (¹) *Journal of Mental Science*, October, 1911.

Personal history.—He was a full-time child of instrumental delivery, the sixth of a family of eleven. His mother had two miscarriages, and the eighth pregnancy resulted in twins. He cut his teeth, walked and talked at the usual times, and had no convulsions in infancy. At ten, he was sent to an industrial school as a truant and unmanageable at home. He left there at fifteen, only reaching Standard V. Shortly afterwards he went to prison for three days for using obscene language, and at the same age he had five days' and fourteen days' imprisonments for stone-throwing and assaulting the police respectively. At sixteen, he had

twelve months' imprisonment for robbery with violence, and on his release he enlisted, but deserted after four months' service. When seventeen, he was sentenced to twenty months' imprisonment for shop-breaking, when nineteen, three years' penal servitude for housebreaking, when twenty-two, three years' penal servitude for shopbreaking, when twenty-six, five years' penal servitude for robbery with violence. He first showed symptoms of insanity in 1908, and was transferred to a criminal asylum, from thence here, before the completion of his last term of penal servitude.

Mental condition on admission.—He was correctly orientated, and showed a proper apprehension of his surroundings. Though poorly educated and below the average in mental calibre, his memory was good, and he gave a clear account of himself. He was, however, somewhat reticent and guarded in his replies. Delusions were obviously the chief content of his mind, and hallucinations of hearing and of smell were active. Hallucinations of sight and organic sensation had formerly been present. He believed that he was secretly watched, and that some mysterious force opposed his intellectual progress, controlled his speech and actions, affected his sexual apparatus and the fluids of his body, and was responsible for his various psycho-sensory disorders. He attributed his chequered career to it, and labelled it in his own mind as persecution by the Government. His demeanour was strange, and his personality much altered. He claimed descent from highly intellectual parents, and thought that he would have been a valuable asset to the country on account of his special political knowledge and great intelligence. He was absorbed, inactive, and had a curious literal and stilted style of speaking, and various other mannerisms. He was callous, and without moral and religious feeling and family affection. He had no shame for his criminal career and for the vice and criminality in his family.

Progress.—He has not materially changed since. He is reserved and peculiar, but makes no secret of the degeneracy of his family. He employed himself usefully for three months, when he suddenly became excited and hostile. He soon settled down, but has refused to work since. His delusions have progressed, he is much hallucinated at times, and the altered personality is progressing. He now prefixes "Whitelaw" to his name, shows more exaltation, and refers all queries on the subject to Whitelaw Reid.

Diagnosis.—He seems to be a fairly common type of an insane criminal. He has systematised delusions of a persecutory nature, associated with widely distributed sensory perversions, leading to an altered personality. Some of his symptoms suggest that there will be rapid progression and reduction. There is certainly a basis of congenital defect, chiefly moral, and the following study of his family history is the chief interest attached to the case.

Family history.—It will be seen from the attached genealogical Table that the patient (sixth in a family of eleven), an insane criminal, has two brothers, also insane criminals, at present in a criminal asylum. The elder, now undergoing his fourth term of penal servitude, was educated at a reformatory school, is an alcoholic, and has a long list of convictions. The younger (eleventh in family), now confined for his

first term of penal servitude, was also educated at a reformatory school, and has been convicted several times.

Of the three remaining brothers, one, a twin of the eighth pregnancy, died at thirteen years, the other two were educated at reformatories, but, so far as is known, have shown no further criminal tendencies since. They are both married, the elder having five healthy children, the younger one.

Of the patient's sisters only one, who has been interviewed, and is the other twin of the eighth pregnancy, seems to have led a decent existence. She is of a sound average type, and has four healthy children. The eldest (first in family) is a confirmed alcoholic, a prostitute, and has been in prison several times. She has had two illegitimate children, the younger of whom has been interviewed. The latter is healthy, married, and has two children. The second sister (fourth in family) is an alcoholic, a prostitute, and a criminal. Among her many convictions is one of nine months for robbery. She is single and childless. The third sister (fifth in family) is a bad character, an alcoholic, and has been in prison. She is married, but all her children died in infancy, syphilis being probably a factor here. The fourth sister (seventh in family) died at nineteen; she was a prostitute, and had one illegitimate child, who died in infancy.

The patient's mother is still alive, and has been interviewed. She has been once in prison, is fond of drink, and fairly typical of the low neighbourhood in which she lives. She withheld information about her own side of the family, and only corroborated what was previously known under pressure. The patient has heard that there are more abnormal factors on her side, but they are uncertain and have not been included. Her only sister, a deaf-mute, died as the result of an accident. Her elder brother died weak-minded in an infirmary. He was a hawker, and had one sentence of two years for stealing. The other brother, now dead, had been in prison, and was an alcoholic. Neither of the brothers, nor the two step-sisters by the same father, had any children. No abnormality is recorded about the step-sisters; they were both married.

The patient's father died at seventy-two. He was a cab-driver, an alcoholic, and had several minor terms of imprisonment. Neither of his two sisters had children, though the elder, a housekeeper, was married. She had a legacy from her employer, which she quickly dissipated. His elder brother, normal as far as is known, had an only son, a criminal, who has already served two terms of penal servitude. The latter is single.

The paternal grandfather was an alcoholic. Of his three brothers, two committed suicide and the other had to fly the country.

The tree thus comprises five generations—the patient's, two ascending, and two descending, fifty-two individuals in all. Of these, nineteen are known degenerates. In the first generation, which is incomplete on the maternal side, there are four known abnormal constituents, all on the paternal side. In the second generation there are five abnormal constituents—four maternal and one paternal. One other produces a criminal son.

In the patient's, or third generation, there are twelve.

Males :

Three insane criminals, one being also an alcoholic.

Two needed reformatory education, but showed no further criminal tendencies.

One criminal.

One died at thirteen.

Females :

Four moral degenerates, three of whom are alcoholics, and one is a criminal.

One apparently moral.

Of the possible twelve in this generation able to produce descendants, only six have done so. In two cases the progeny died in infancy, thus limiting the fourth generation to three families containing ten children, and the two illegitimate daughters of the patient's eldest sister. The fifth generation is at present comprised of two only—the children of the younger illegitimate.

An outstanding and interesting feature in the second generation is the mating of two alcoholics with criminal tendencies, the male inheriting a taint from his sire—simplex inheritance in Mendel's nomenclature—the female, multiplex, with no known taint.

The result is a family of eleven, of whom only one of the ten reaching adult age is a healthy, normal individual. All the others show degeneracy to some degree.

In the same generation, three other females marry but die childless, and the only other mating, a male with simplex inheritance, produces an only son, a criminal.

Regarding the two descending generations, in whom, so far as is known, no degeneracy has appeared, the future only can reveal, remembering that new stock has appeared to leaven the old. At any rate, there appears to be a considerable tendency for the old stock to die out, as is not uncommon among degenerates where alcoholism and syphilis, squalor and privation are often also factors mitigating the chances of existence.

It is interesting to note that epilepsy has not invaded any branch of the family.

I leave it to the reader to draw his own conclusions as to whether heredity or environment (the slums of London) is the stronger factor in this extremely degenerate family.

A Case of Manic-Stupor. By HENRY DEVINE, M.D., B.S.Lond.,
M.R.C.P. Senior Assistant Medical Officer, West Riding
Asylum, Wakefield.

CASES of manic-stupor present an interesting combination of symptoms which serve to demonstrate the close association existing between the symptoms of maniacal excitement on the

one hand and states of depression on the other. It was the existence of these mixed types of psychosis that lent support to the conception, formulated by Kraepelin, that mania and melancholia were merely phases of one fundamental disorder, *viz.*, manic-depressive insanity. The following case has been under observation at intervals extending over a period of twenty years.

M. D— was first admitted to Wakefield Asylum on June 29th, 1891. She was then 17 years of age. She was somewhat poorly nourished but normally developed, and exhibited no pronounced degenerative stigmata. An aunt had died in an asylum, one sister became mentally deranged and died of pneumonia, and later another sister died of phthisis. She was unmarried at this time and has remained so since.

Previous to admission she had been growing peculiar and acting strangely for three months. Had latterly refused to speak, sat muttering to herself, had been sleepless, and often spent the whole night laughing.

On admission she could not be induced to speak beyond saying once in answer to a question, "How do I know?" She understood what was said to her and obeyed simple requests. Muttered a good deal to herself and laughed frequently in a silly fashion. Constantly made strange grimaces. For two months she appeared to grow increasingly demented. Was neglectful in habits, tore her dresses, and at times struck out impulsively at those around her. At the end of August she began to rapidly improve and was discharged on October 6th, 1891.

The second attack occurred twelve years later and she was admitted to the asylum on July 22nd, 1903. In the interval she had been earning her living as a tailoress and had lived with a sister. She had then been mentally deranged for a fortnight.

The friends stated that she had been constantly talking to imaginary persons, and that she said her father, mother and sister, who had been dead many years, came to see her at night. On one occasion she had taken a neighbour's child and attempted to throw it into a pond.

When admitted to the asylum she was in the same inaccessible condition as on the previous attack. Exhibited peculiar mannerisms, constantly stroked her hair and persisted in licking her finger and moistening her elbow with the saliva. She refused to speak but made hideous grimaces. At times became excitable and impulsive. In November she suddenly improved and was discharged on November 29th.

The third attack occurred in 1906, and she was admitted to the Asylum on July 17th. It was stated that she had been brooding a good deal for some time. Refused to speak for several days together and sat about doing nothing. Her mental state upon admission was one of depression. She was free from confusion, correctly oriented, and answered questions after considerable delay. Sat about listlessly, often sighing deeply. After a few days, however, the attack assumed

the same characters as the previous ones—mutism, grimacing, and curious gesticulations. She was discharged again on September 20th.

She was readmitted on August 14th, 1909, this being the fourth attack. She had been peculiar for a week, stated that she was only eleven years old and had been making dolls which she nursed all day. The mental state resembled that on previous admissions and she showed no signs of improvement until February, 1910. Was discharged on April 25th, 1910.

In May, 1911, she was again admitted to the Asylum and came under the personal observation of the writer. The friends stated that she had kept well until a fortnight before admission. She had become restless, at times violent, would talk for hours to the pictures on the wall and sang a great deal of nonsense. When admitted she was rather restless and fidgety. She was constantly giggling to herself and fingering a piece of thread she had tied round her finger (probably a representation of an engagement ring). When spoken to she put her hand to her mouth and shook with suppressed mirth. Practically no information could be elicited from her. She made movements of her mouth as if speaking, but only occasional, almost inaudible, whispers could be made out. One could ascertain that she knew she was in Wakefield Asylum, and once she was understood to say that she was going to marry her cousin in a month's time.

For about six weeks she remained in a characteristic state of manic-stupor. She would sit about in one position for the greater part of the day, occasionally, however, walking about, gesticulating, and looking at the pictures. She made no attempt to dress herself, was at times neglectful in habits, had to be led to the table for her meals, and was sometimes fed with the spoon by the nurse. Most of the day she would sit making grimaces and sometimes waving her arms about. She remained absolutely mute. When questioned she exhibited most extraordinary facial contortions, shaking meanwhile with silent laughter. It was quite obvious that she understood what was said to her, and she was fully alert to what was happening around her, peering inquisitively about. She showed no particular resistiveness, and would obey simple requests, *e.g.*, put out her tongue, shake hands, etc. At times showed a tendency to be mischievous, pulled leaves off the plants, or snatched up little articles which happened to catch her eye.

At the end of a few weeks the patient improved and exhibited a brief phase of mild depression. The expression became sad and subdued; she replied to questions in a listless tone and was generally apathetic. She could throw no light on her former peculiar behaviour but supposed she must have been "run down." She soon completely recovered, developing into a useful worker, pleasant and obliging. The general intelligence was of a somewhat low order and she was poorly educated, but she exhibited no apparent degree of mental deterioration. She was discharged in October, 1911.

This case presents no particularly unusual features, but is considered worthy of brief record since it represents a type of psychosis which merits wider recognition. The diagnosis

presents but little difficulty in view of the history extending over many years. It is evidently a case of manic-depressive insanity, as shown by the occurrence, at varying intervals, of single attacks ending in recovery without any evidence of permanent mental enfeeblement.

The particular feature of interest is the character assumed by the psychosis on each attack. It is described most suitably as *manic-stupor*, and exhibits a curious intermingling of the symptoms characteristic of the depressed and maniacal phases of manic-depressive insanity. It is thus what Kraepelin describes as a "mixed" form of the psychosis. The depressive symptoms are shown in the inhibition of speech and general motor inactivity—disinclination to move, eat, wash, or dress. The maniacal symptoms are exhibited by the hilarious mood, extraordinary grimacing, mischievous behaviour, alert and distractible attention, and at times outbursts of anger and violence.

These "mixed" forms may assume various characters and give rise to somewhat anomalous clinical pictures. It is for this reason that their recognition and study would seem to be of some importance. In the present case the resemblance to katatonia is somewhat close, the mutism and curious mannerisms being especially suggestive of this form of reaction. Without some knowledge of the history or in the first attack of the series, an unfavourable prognosis might easily be given. Many demented cases present a similar clinical picture. Kirby, in a paper on this subject, mentions a very similar case, and observes that she had been repeatedly regarded as a deteriorated patient by physicians who had examined her.

It would therefore seem important to keep in view the existence of this type of case in order to avoid the diagnosis of a similar condition with a very different prognosis.

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Recent Medico-Legal Cases.

REPORTED BY DR. MERCIER.

[The Editors request that members will oblige by sending full newspaper reports of all cases of interest as published by the local press at the time of the assizes.]

In these days of eugenics, the following case is of interest.

NULLITY OF MARRIAGE.

BODMAN *v.* BODMAN, OTHERWISE PERRY.

This was a summons by way of appeal to the President from an order of the Registrar striking out a paragraph in a petition for nullity.

Mr. Croom-Johnson appeared for the petitioner, and Mr. Bayford for the respondent.

Argument for the Petitioner.

Mr. Croom-Johnson said that the petitioner, George Bodman, was married to the respondent in 1889, and there were two children of the marriage.

The material paragraph in the petition, which prayed for a declaration of nullity of the marriage, was paragraph 5, which set out "that the performance of the said ceremony of marriage was procured by the fraud and contrivance of the respondent. That the petitioner was induced to consent to the said ceremony of marriage by a false and fraudulent representation made to him by the respondent that, with the exception of her uncle, John Osmond, an inmate of the Earlswood Asylum for Idiots, all the known members of her family were and always had been of sound mind, and that no member of her family was or ever had been afflicted with mental disease. The petitioner believed in and relied upon the said representation. In truth and in fact, as has since come to his knowledge and as the respondent then well knew, idiocy and insanity had existed and were prevailing in her said family to an extensive degree."

On February 9th the Registrar made an order that that paragraph should be struck out from the petition, and it was against that order that the petitioner appealed on the present summons. The suggestion in the paragraph was that a marriage contract was a contract subject to the ordinary rules of contract law.

The Authorities.

Counsel wished to show that the petitioner had an arguable case on that point, and he would not seek to show further that he was neces-

sarily entitled to the relief claimed. The point was not entirely a new one, and up to the decision in *Moss v. Moss* (1897, p. 263) there was no authority which dealt with it. In so far as it had been decided in *Moss v. Moss* (*supra*) it was law, but it had only been decided in that case by a Judge of first instance, and his client wished to test that decision by taking his case to a tribunal that was not bound by it.

Counsel cited *Scott v. Sebright* (1886, 12 P.D., 21) in support of his argument, and observed that though the passage he relied on in the judgment in that case was undoubtedly *obiter dictum*, it apparently stated the law as the petitioner in the present case wished it to be. He was bound to say that *Moss v. Moss* (*supra*) was contrary to that dictum. Further, there was no authority contrary to *Scott* and *Sebright* (*supra*) that was not a decision of a Judge of first instance. In the course of the arguments in *Moss v. Moss* (*supra*) there were three cases cited which had come before the House of Lords when that House had jurisdiction in Marriage Bills. In *Turner's Marriage Annuling Bill* (1826, *House of Lords Journals*, vol. lx, 270) the marriage had been brought about by conditions into which fraud entered largely; but there were no threats or duress proved, though the latter had been pleaded.

In that case the lady, who was very young, had been persuaded to leave school by a forged letter, and was told by the respondent that her father was on the point of financial collapse, which could only be averted by her marrying the respondent, who would satisfy the creditors. All that was in fact untrue, but Miss Turner went through a ceremony of marriage, though it did not appear that she realised what was being done at the time. Counsel also cited and distinguished *Field's Marriage Annuling Bill* (2 H. L. Cas., 48) and *Wharton's Marriage Annuling Bill* (14 *House of Lords Journals*, 583), and said that in the latter case the lady was abducted, and it was clear from the evidence she knew what she was doing at the time and consented to it, and that there was no violence or duress. In *Knight's Marriage Annulment Bill* (16 *House of Lords Journals*) the lady had petitioned the House not to annul the marriage as she was fond of the respondent. The House, however, did so on the ground of fraud.

The decisions in all those cases had, he submitted, left the point open to him, notwithstanding the later decision in *Moss v. Moss* (*supra*). He asked the Court to say that the petitioner had such an arguable case that it could exercise its jurisdiction and allow the paragraph in the petition to stand.

The Argument for the Respondent.

Mr. Bayford submitted that the allegations set out in the paragraph, even if true, could not constitute such fraud as in law would vitiate the marriage. According to the argument for the petitioner, any misrepresentation would avail to set aside a marriage. If any man or woman said, "I have £300" when in fact they only had £250, on the petitioner's argument the marriage ought to be annulled on the ground that the consent of the other party had been fraudulently obtained. The whole question as to that class of fraud had been considered and

determined in *Moss v. Moss* (*supra*). There was no authority for the suggestion that the point was an arguable one.

The President: The paragraph mentions mental trouble in the wife's family. What line is to be drawn between sanity and insanity?

Mr. Bayford: Is anyone sane? I say there is no ground for a plea unarguable in law on the authorities. I ask your Lordship to uphold the decision of the learned Registrar.

The President: These parties were married twenty-two years ago, and their sons are nearly of age. The petitioner hopes for a declaration that that marriage is null and void on the ground of some representation made at the time as to the mental condition of some of the wife's family. *Moss v. Moss* (*supra*) was decided fifteen years ago, and has never been appealed against. It is quite enough for me that the petitioner's counsel admits that his case is governed by *Moss v. Moss* (*supra*), and I will not disturb the Registrar's decision. The summons will be dismissed with costs.

Mr. Croom-Johnson: I ask for leave to appeal.

The President: I shall not give it you. You can take a preliminary canter in the Court of Appeal and tell them there what your point is.

Solicitors: Last, Sons, and Fitton; George Bodman.

The case of the petitioner was prejudiced by the long delay in presenting his petition. It may be that the facts on which the petition was based—that idiocy and insanity had existed and were prevailing in the respondent's family to an extensive degree—had only recently come to the knowledge of the petitioner; but although this would be no bar to his success if marriage were generally voidable on the ground of fraud, it would clearly be a bar to nullifying, on the ground of public eugenic policy, a marriage that had been in existence for twenty-two years, and that had already produced all the offspring likely to result from it. The learned President expressly based (according to the report) his judgment on this ground, and presumably if proceedings had been taken at an earlier stage, say within a few weeks or months of the marriage, the decision might have been different. Any subsequent case in which proceedings may be taken at an early date after the marriage will be prejudiced by this decision, and can scarcely succeed; but if it is eugenically undesirable that such marriages should take place, such a petition, if the facts are established, ought, on the ground of public policy, to succeed. Mr. Bayford's contention is a complete answer to the argument for nullifying a marriage on the general plea of fraud, for it cannot be contended that a marriage should be set aside on account of an

ante-nuptial misrepresentation of fortune by either party ; but it is no answer to this particular case of fraud, which goes to the root of the reasons for marriage as set forth in the Book of Common Prayer, as interpreted in the light of eugenics.

The President's question—What line is to be drawn between sanity and insanity ?—seems very inappropriate. Surely, in law, a person found lunatic by inquisition is insane without a doubt ; and for the purpose of the trial of such an issue as this, evidence that a person has been detained under the Lunacy Acts or under the Idiots Acts is sufficient to establish *primâ facie* insanity. As to other persons, not lunatics so found, and not detained under care, the Court over which the learned President presides determines every week the line that is to be drawn in particular cases between sanity and insanity.

I am not an enthusiast for the prohibition of marriage of members of families in which lunacy prevails, even extensively. No one with much experience can have failed to have seen instances in which the offspring of such marriages have been exceptionally able and useful members of society. But it is a pity that such a case as this was not tried on its merits, and without the disqualification of the petitioner's case that resulted from the long delay in bringing the action. On the other hand, this very delay may have furnished a conclusive argument on one side or the other. If the offspring are, in fact, not affected as to their sanity, the petitioner's case from an eugenic point of view falls to the ground. If they are, in fact, defective, then he has the additional grievance against his wife of presumably saddling him with defective offspring. I say presumably, for it would still be an arguable point, and a point by no means easy to decide, whether the defect of the offspring were, in fact, due to inheritance through the mother or to some other cause. Those who belong to families in which insanity prevails extensively are no more exempt than other persons from the causes which produce sporadically defect of sanity in the children of those other persons.

Occasional Notes.

Sir George H. Savage.

IN the list of honours, in which the name of Sir George H. Savage recently appeared, there is probably not one that will give a more widely felt feeling of satisfaction and gratulation than that conferred on him.

These feelings are not only unanimous in the Medico-Psychological Association, but are shared by a very wide circle of professional and lay friends, with whom he has been associated in his many-sided activities. The only other feeling it could excite is that of surprise at the honour not having been conferred at an earlier date.

There is always an additional feeling of satisfaction in regard to titles conferred on men of science, that they are real honours uncontaminated by any possible suspicion of party-purse purchase.

Greatly as Sir George Savage has deserved by his practice, teaching, literary and scientific work, there is, in this honour, following on those that have preceded it, a ground for hope that it conveys a recognition of the specialty to which he belongs.

So long as the honours were limited to the holders of Government appointments, it could only be felt that the recognition was of the official, rather than of the alienist, especially while men of such standing as Sir George remained unnoticed.

In tendering our hearty congratulations to Sir George Savage, we are not detracting from his great deserving if we entertain this hope, that the specialty is also at last to be congratulated in the honouring of a prominent, popular, and distinguished member.

H. R.

The Lunacy Commission.

Two additional Commissioners, one legal and one medical, have been appointed by the Lord Chancellor.

The views of the Medico-Psychological Association regarding the constitution of the Commission have from time to time been referred to in the pages of the *Journal of Mental Science*, and this is not an occasion for re-stating them.

We desire to offer our congratulations to Mr. Barnard Thornton Hodgson on his well-deserved promotion, and we feel sure that the ability and courtesy which he displayed as Secretary will characterise his work as a Commissioner. We desire to congratulate Dr. Charles Hubert Bond also, who, as Honorary General Secretary, was so well known to the Association.

It cannot be otherwise than a great advantage to the Commission, with its increasing responsibility and important work, that a physician of Dr. Bond's professional attainments and experience has been chosen.

Dr. Bond's abilities are too well known to require recapitulation. We need only draw attention to his work in connection with the revision of the Association Tables, and the fidelity and enthusiasm with which he has carried out the duties of Honorary General Secretary. His intervention in our debates and deliberations tended to clear the atmosphere, and he was always ready with some practical suggestions.

His skill as an organiser and his high ideals of what a modern asylum should be are exemplified in Long Grove, whose present state is a striking testimony to the efficacy of his labours for the advancement of all that is best in the proper care and treatment of the insane.

Part II.—Reviews and Notices.

Conduct and its Disorders : Biologically Considered. By CHARLES ARTHUR MERCIER, M.D., F.R.C.P., F.R.C.S., etc. London : Macmillan & Co., 1911. Pp. 377. Price 10s.

Dr. Mercier has again broken new ground in this treatise on Conduct. He had already given us works on insanity, psychology, criminal responsibility, law and logic ; and all his books have not only been a gain to the subjects he handled, but, without exception, have added to the great body of English literature. His form as well as his matter is always good. All that he has written has exhibited, in an abundant degree, clarity, force, eloquence, original thought, and individuality. He never leaves any doubt as to his meaning. It must be a source of pride to all psychiatrists and contributors to the *Journal of Mental Science* that they have among their number at least two men (Maudsley and Mercier) who have touched the highest point of literary style, of expert knowledge and of philosophic medicine. Our science and art is so intimately connected with human nature and life in all departments

that mankind may fairly demand of us help and insight in regard to many matters beyond our speciality. Our study and experience enable us to see social problems from a point of view different from any other scientists, and we are bound to put this at the service of our fellow men. I would say that Dr. Mercier's book on Conduct embodies the highest evolution of this duty. No one but an expert in our department could have written some of its chapters. The whole book makes for moral conduct in the highest sense, for advance in our social life, and for the *mens sana in corpore sano*. Dr. Mercier has specialised a new department of science which he calls "Praxiology," or the systematised and scientific study of human conduct. "The study of conduct never has been systematised; there is no science of human conduct." This book is an attempt to organise and systematise our knowledge of human conduct. "The principle on which the investigation of human conduct is here made is the biological principle." He says: "My aim is merely to describe and explain," but he does far more than that; he generalises and systematises our knowledge, and no one can read his book without being made himself to think on the subject. It is full of suggestions in every page, and I have never read a book in which I have put so many marks of assent or interrogation. Throughout, the book is earnest and rings true. It cannot fail to add to its author's already great reputation as a thinker, a scientist, and a man of literature. It may well be said of him—*Nihil quod tetigit non ornavit*.

As we read the book the idea constantly occurs: This is so clear and obvious that it seems strange that previous writers and thinkers have not told it to us before, but it is high praise for any man to explain the every-day, the common-place, and the obvious in so complicated and wondrous a thing as human life. Even as we read the title the thought occurs: "Why, human conduct is the matter which all history, biography, and fiction has been trying to elucidate and expound throughout the ages. Can anything more be said about it than has already been said by the world's greatest minds?" It appears that something more can be said of it—something original, practical, and extremely useful—and that has now been said by Dr. Mercier in this book, whose aim is not theoretical only but intensely practical. No sociologist, no moralist, no psychologist, and no Christian but should be acquainted with the principles and facts so vividly expounded and described by the author. It should well mark an era in our own science of psychiatry, and we trust it will be used as a text-book by the students of our universities.

Dr. Mercier begins his book by discriminating the different forms of action and the study of "ends and purposes." His eleven varieties of action might perhaps have been reduced in number without detriment by the fusion of two or three of them. They range from the spontaneous movements of the amœba up to the original and elaborate happenings in the life of the man of genius. In treating of instinctive action he thus points out the effects of the coming in of reason: "The first result of the importation of reason into instinctive action is, then, this suspension of the immediate or direct pursuit of the end; it imports a power of suspending, checking, controlling, restraining, or inhibiting instinctive action. This power of inhibition is inseparable from the

exercise of reason. It is an integral part of reasoned action, and the more reasoning employed the more and more of inhibition is involved in the action. Reason means first of all choice ; it implies a selection between alternatives, and however rapidly the choice may be made there is always some interval of time occupied in making the selection."

Dr. Mercier directs special attention to the fact that the study of conduct is especially important in education and in psychiatry. "It is, however, in the study and treatment of insanity that a systematic knowledge of conduct is most necessary, for insanity is, in the main, disorder of conduct, and for disorder to be estimated order must first be known." "The psychiatric physician, whose function it is to treat disorders of conduct, not only makes no systematic study of conduct, but denies that such a study is desirable, even if he admits that such a study is possible." Some of us would not admit that the latter two statements are quite correct. In my clinical teaching I used to tell my students to observe, first, what the patients did, second, what they looked like, and third, what they said, and every one of us, as a matter of fact, studies the conduct of our patients. Ever since Dr. Mercier began to insist that mental disease chiefly consisted in conduct I have impressed those views on my students, and in the witness-box I have often quoted them. Throughout the book Dr. Mercier draws illustrations from psychiatry of his various theses. He speaks of the altered conduct of the dement, of his disregard of decency, conventionality and order in his conduct, and of his tendency to reversions of conduct, towards that of primitive man and even animals. He especially draws attention to the loss of self-control, which he places, as I place it, as the most essential characteristic of the insane.

In treating of the varieties of action the author has a very interesting and convincing chapter on "Instinct and Reason, their Distinctions and their Relationships." Scientists will generally agree with the conclusions he arrives at. The next ten chapters, which form the basis of the whole treatise, analyse social conduct in an exhaustive manner, following it out in its innumerable forms. The psychological and scientific subtilty of Dr. Mercier's mind is exercised and evidently delights in the analysis and systematisation of the various forms of human conduct. To the ordinary reader it may sometimes seem as if the distinctions were overdrawn and that the sub-classes of conduct might have been more merged, but the more one reflects on the subject the less those objections obtrude themselves. Self-conservative conduct, social conduct, the social instinct, social inhibition, shyness, self-consciousness, ambition, pride, vanity, conceit, suavity, patriotism, spontaneous and elicited morality, chastity, modesty, courtship, jealousy, marital and filial conduct, are headings which show the immense and thorough range of the author's investigations. It is all most interesting reading. It promotes self-analysis and reflection in the reader's mind.

All who know Dr. Mercier's axiomatic, epigrammatic, and sometimes paradoxical mode of putting things, sometimes experience violent feelings of disagreement with him, but that is really one charm of his writing. For instance, he says, "Self-denial and self-restraint as ends in themselves are no more desirable than burying bones, or ringing church bells or learning Latin." The author would no doubt find this very easy to

prove to himself in his subtle and somewhat ultra-logical way, but yet the proposition as it stands either shocks or amuses the common mind by its apparent absurdity, as does the following definition : "Work is doing what you don't like, play is doing what is pleasant to do and what we would rather do than not." Those dicta obviously need enormous qualifications, but some of us would have more serious differences with Dr. Mercier than this. For instance, he habitually reverses the order of precedence of the two great instincts of living beings, namely, of the love of life and of reproduction. He says, "It matters not, therefore, whether we take the reproductive activities, as the most primitive to which all others are secondary and subsidiary, or the self-supporting or self-conservative which are a necessary preliminary to the reproduction." This sounds, and is, a contradiction in terms. All organisms must first seek for nourishment for their own support and development before they can reproduce. Among the higher animals and in man, self-conservative motives are stronger than reproductive motives. Self is a greater thing even than sex and is more loved, but those are, after all, spots on the sun.

He dwells on a fact little realised when he says : "The influence of the community upon each of its members is primarily inhibitory. The condition of living in a community is the surrender of some of the freedom of individual action, and correspondingly the effect on the individual of the presence of his fellows has an inhibitory effect ; it limits his action."

Dr. Mercier's whole treatment of the question of morals is original and highly instructive. He says : "Conduct that is regarded as immoral and wrong is conduct injurious either to the community as a whole or to individual members or classes of the communities or to the stirp. These, I say, are the qualities in conduct that are respectively approved and called right or moral or disapproved or called wrong and immoral." He divides his subject into "spontaneous" morality and "elicited" morality. Both this definition and this distinction may, I think, be capable of controversion. Is there no innate feeling of right and wrong apart from approval or disapproval by others? Is there no such thing as a moral instinct? Is there no harm that is done by immoral conduct or thought to the inner self apart altogether from harm to the community or the approval or disapproval of self or others? He seems to admit this when he says : "The highest and truest morality is that which is dictated by the internal factor alone, that which is followed from an instinctive desire to do what is believed and felt to be right, to avoid and repel that which is believed or felt to be wrong."

"To thine own self be true;
And it must follow, as the night the day,
Thou canst not then be false to any man."

The whole life and writings of Marcus Aurelius, the purest type of the Stoic school of philosophy, are surely a vivid illustration of the independence of the moral ideas of any other form of approbation than that of the inner self. Therefore the author's dictum that "The instinct to do what we believe to be right merely because it is right" is, in other words, an instinctive desire for self-approval, is putting the moral idea

on too low a basis. Less can we agree with the following: "As has been shown the root of morality is social advantage." The following axiom should be very consolatory to the wearers of the hobble skirt: "Following the fashion has its origin in that biological necessity for uniformity of action on the part of members of a community." When Dr. Mercier lays down the principle that "History is one long record of resistance to change of custom, resistance that has always been strenuous, often sanguinary, and was at last overcome," he no doubt realises that this is only a half truth, and that, put in the converse way, it would be equally in accordance with historical fact, but then explicit statement is the very soul and life of the author's writings, and to him are quite irresistible. "Friendship cancels obligation on the one side and the expectation of return on the other" is a good example of a charming epigram worthy of Montaigne.

Dr. Mercier says—"The disintegrating fact of difference of opinion is of great moment. Its centrifugal action between man and man, not being counteracted by the gravitation of sympathy, would overpower mere pressure from without and cannot therefore be permitted to exist. However much we may deplore the suppression of the researches of Roger Bacon, of Bruno, of Galileo and of many another pioneer and martyr of science, we cannot but recognise that scientific research is harmless in highly organised communities only, and that the first necessity for a community is its own preservation. If Roger Bacon and Bruno and other rare spirits of early times, who were so much in advance of those times, had been permitted to carry on unchecked the researches which so attracted them and have made their names immortal, it is possible, nay, it is probable, that the result would have been a division of opinion that would have been altogether destructive of the communities in which they lived, and that for every century that discovery was retarded by the destruction of the leaders, a millenium would have elapsed ere knowledge would have reached its present state of advancement." But might not unchecked researches have greatly hastened our present civilisation?

I would run this review to an altogether inordinate length were I to extract half the gems that occur in the book. "Female chastity is a great national asset." "The combative man is approved and honoured while the meek are disapproved and despised in spite of the great inheritance that they are to expect." Another of his half truths is thus expressed in treating of racial conduct: "The need of continuing the race is, as has been said, probably the root from which all modes of conduct have grown. It is the ultimate end of all organic life and the primary motive of all conduct."

Dr. Mercier's chapter on sexual modesty is by far the best exposition of this profoundly important and most interesting quality of humanity that I have met with. I have often wished to write such an exposition myself, but have always failed in the attempt.

I think the author's definition of religious conduct as being "divisible into two categories—religious observances, whose object is the propitiation of the Deity and the rendering of worship and honour and the carrying out of the behests that the religion inculcates," should be

supplemented by a third object, which is the quickening and strengthening of the subjecting feeling of reverence—reverence not only for the Deity but for the good, the old and the great among mankind. Dr. Mercier's power of eloquent writing finds its acme in the paragraph on page 267 on renunciation: "To share the advantages of common life in any degree; to taste the sweets of companionship; to gain the advantage of common action against enemies; of protection in helplessness; of nurture in sickness; of nourishment in poverty and starvation; to enjoy the delights of being approved, admired, applauded, loved; to attain the rare and more refined states of rendering services to others; to participate in the luxuries and glories of an advanced civilisation; for all these advantages a price must be paid, and the price is renunciation."

It is true, but not often thought of, "that in every militant community—in every community that has had to sustain itself by strife with others, and has triumphed, some religion is a dominant factor." "The fanatical religions have been uniformly successful against those in whom its fervour has been lukewarm." He states that it is "the fundamental function of religion to frown upon, discountenance and restrict the two other primary modes of conduct that conflict with social conduct, this is the biological function of religion." "The origin of religious observance is in the desire to propitiate a being who is malignant. I know of no primitive religion in which the deities are conceived as benignant." I would rather put it that there is a biological necessity and quality in all humanity that may be called religious instinct, which exists as a fact in man like the social instinct, the appetite for food, for sex, etc., and that this is the foundation of all religious observances and a sure proof that religion is a real necessity for mankind. Dr. Mercier's biological explanations of the celibacy of the clergy in many religious bodies and their antagonism to investigation and research, and of the self-torture of the religious devotee, are no doubt correct, but they will not be well received by the professional religionists.

The chief criticism which I would venture to make on Dr. Mercier's whole position is this, that he does not attach sufficient importance to emotion as being the primary origin of conduct. Biological and psychological facts all point to this. In man and the higher animals it is feeling which chiefly dominates conduct and sets the muscular apparatus into action. Emotion is as much a biological factor in man as instinct is in the lower animal life, and it influences conduct at every point. Man has over fifty muscles, which I call "mind-muscles," in the face and eye and larynx, whose chief function it is to express emotion, and thus produce instantaneous action or conduct. Darwin's great work on *The Expression of the Emotions in Man and Animals* has settled once for all the connection of action and emotion. The later school of psychologists—James and Ribot particularly—would put muscular action causative and first, and conscious emotion second in sequence, but that theory is yet unproved and is very difficult to prove. In a second edition of the work I trust Dr. Mercier may make the relation of emotion to conduct more clear than he has done in this. The nearest approach to the expression of this great

truth is when Dr. Mercier treats of desire. But then desire does not cover the whole field of emotion. It is a restricted emotion directed to the attainment or possession of an object from which pleasure is expected. It is a passion excited by the love of an object. I would place the feelings in the following order of intensity—emotion, desire, craving, their results being self-conservative, social and racial conduct.

If the readers of the *Journal of Mental Science* desire to experience an exquisite pleasure, to be stimulated to many new lines of thought, and to receive explanations of many obscure facts in their daily experience, they will read this charming and most illuminating book.

T. S. CLOUSTON.

Formal Logic: A Scientific and Social Problem. By F. C. S. SCHILLER, M.A., D.Sc. London: Macmillan, 1912. Price 10s.

The whole history of literature presents no parallel to the almost simultaneous appearance of this book and my *New Logic*. The simultaneous presentation of Natural Selection by Darwin and Wallace was intentional and designed. Both had been working at the subject unknown to one another for years; but their agreement was known to Darwin, at any rate, before publication. Adams and Leverrier published almost simultaneously their discovery of Neptune; but the discovery was not, like that of Darwin and Wallace, the contradiction of a doctrine until then universally accepted; it was merely an application of a doctrine already in vogue. But that a doctrine that has been universally accepted for more than two thousand years, that has been received and passed on by generation after generation without question and without doubt for that enormous length of time, should at last be violently attacked root and branch, lock, stock, and barrel, by two antagonists within a month of one another, and without consultation, agreement, or collusion between the authors, is, as far as I know, entirely unprecedented.

The agreement is as close, in many respects, in point of matter as it is in point of time. Dr. Schiller and I both attack formal and traditional logic all along the line, in every principle and in every detail; we both find in it the same defects, the same futilities, the same contradictions; we both identify the same principles as those on which an efficient and valid logic ought to depend; we both use actually, in some cases, the same illustrations and the same allusions. We both call to our aid the story of the Emperor's clothes from Hans Christian Andersen.

Such an agreement seems to me highly significant. It seems to me to indicate the close of one epoch and the beginning of another. It seems to me to show that a revulsion against the doctrine and methods of traditional logic is "in the air." It seems to me that the fulness of time is come; that the generations and years and days of traditional logic are accomplished; that the time is ripe for a revolution; that the minds, not only of Dr. Schiller and myself, but of many others, are dissatisfied with logic as it is taught, and unconvinced by it; and that its downfall is at hand. If there are two who are so far moved by

a perception of the futility of logic as to write big books against it, how many more must there not be who are moved in the same direction, but to a less extent ; whose dissatisfaction, perhaps not less profound, is less articulate ; whose want of conviction causes them to pass it by with a shrug, or to long for someone else to undertake the task of exposure for which they do not feel the qualification, or do not possess the leisure ! For the first time in its long history, Aristotelian Logic is on the defensive. It has now to justify its existence.

Bacon, it is true, rejected it ; but he did not attack it in detail. He put it on one side as having led to no practical result. He did not attempt to show that logic did not, in fact, display and account for the way we reason. His argument was—"Let us give up attempting to show how reasoning is carried on, and turn our attention to the accumulation of facts." As an organon for the discovery of truth he derided it, on the ground that no truth had ever been, or could ever be, discovered by its means ; but he never sought to show that the methods by which logic says we reason are not the means by which we do in fact reason, nor did he propose any other method of reasoning.

The Inductive School proclaimed themselves followers of Bacon ; and they were his followers in this respect, that they held fast to the principle of attaining truth by the observation of fact ; but in other respects they were reactionaries. The syllogism, which Bacon had rejected, was restored by them to its pride of place ; and Mill was, in fact, as convinced as Aquinas, or Erigena, or Aristotle himself that truth was discovered by means of the syllogism.

The central doctrine of all reasoning, putting it in the widest and most comprehensive formula, is that reasoning is the bringing of a particular case under a general law. Thus stated, the doctrine would secure the adhesion of Dr. Schiller and myself no less than of Aquinas and Erigena and Aristotle. It is in our way of finding the general law, and of bringing the particular case under it, that we disagree with our predecessors. Traditional Logic lays down its general law, states its particular case, and has no difficulty in bringing the one under the other, for it takes any statement it pleases for a general law, and any statement it pleases for a particular case. By such means it is not difficult to take a valid argument on any subject ; but we maintain that such an argument is a fake and nothing more than a fake, and does not follow the true process of thought. The position taken up by Dr. Schiller and myself is that in the actual experience of life such easy cases do not occur, but the whole validity and the whole difficulty of reasoning lies in finding, when a particular case is presented to us, under what general principle it can properly be subsumed ; and when we think we have discovered a general principle, what particular cases may be brought under it and what may not. These are matters that Logic airily and completely ignores, and its neglect of them vitiates and nullifies the whole system of Traditional Logic from beginning to end.

The great importance and the great value of the complete agreement as to results between Dr. Schiller and myself lies in the fact that we reach these results by different methods. If an algebraic demonstration attains the same conclusion as a geometrical demonstration, we regard the conclusion as doubly secure. If a spectroscopic analysis yields the

same result as a chemical analysis, we accept the result with redoubled confidence. If a synthetical process corroborates the findings of an analytical process, our confidence that we have the true nature of the substance is confirmed beyond question. Dr. Schiller's method is purely psychological: mine is almost purely logical. The results we attain are practically identical, and we may fairly claim this identity of result as corroborative in the highest degree of the truth of our conclusions. I take the terms and propositions and arguments of Logic at their face-value, and demonstrate that, on their own showing, the positions assumed by logicians are absurd, contradictory and untenable. Dr. Schiller takes the same terms, propositions and arguments as indicative of states and processes of mind, and shows that such states and processes do not, and cannot, exist, and that the supposition that they do exist leads to absurdity and contradiction.

Dr. Schiller's main thesis, which underlies and vitalises his whole argument, is that formal logic, in the sense of a science of the form of thought apart from the matter, does not, and cannot, exist. In every argument and in every statement the matter as well as the form must be considered, and the form depends on the matter. Logic starts with a certain conventional form of proposition, and manipulates it in certain conventional ways, so as to change it into certain other conventional forms. The fact that the conventional form from which it starts is an arbitrary and ambiguous form, which in fact is capable of expressing only a minute residue of our thoughts or judgments; that the way in which logic manipulates this form is never in fact used by practical reasoners; that the forms into which the proposition is changed are grotesque and are never in practice utilised outside of books in logic—these considerations logic lightly ignores. The propositions and the arguments of logic belong to a conventional world of its own, which has nothing in common with the world of practical reality, in which men and women reason for their own and for one another's benefit. In short, logic utterly ignores and neglects the fact that every argument and every statement is undertaken for a purpose, must be adapted to that purpose, and must differ from arguments and statements serving other purposes. For aught that appears in books on logic, arguments are undertaken for no purpose except to provide conundrums that examiners may set for students to puzzle over. That the very same statement may be valid and true for one purpose and invalid and false for another purpose is a fact of which logic is utterly ignorant. "Socrates was a man" is a true and valid statement if it refers to the Socrates who appears in the dialogues of Plato. "Socrates was a man" is neither true nor valid if it refers to my defunct cat, on which I conferred the name of Socrates, or if it refers to a ship so-called. "All men are mortal, and Socrates was a man, therefore Socrates is mortal" is a valid argument if its purpose was to ascertain the mortality of the philosopher. If the purpose was to ascertain the mortality of my cat, it is an invalid argument with a true conclusion. If its purpose was to ascertain the mortality of a yacht, it is an invalid argument with a false conclusion. We can never know whether an argument is or is not valid, or whether the conclusion is or is not true unless we take into consideration the purpose of the argu-

ment. However valid it may be in point of form, it is always liable to be invalidated by a consideration of its matter. Formal logic is therefore, *per se*, useless, silly, and dangerous. Logic can never be of any service unless the matter as well as the form is an integral part of the argument.

It has been made a matter of reproach to me, and I daresay it will be made a matter of reproach to Dr. Schiller, that we go over the same ground as the old logic that we are refuting. For my part, I do not see how it is possible to refute the old logic without going point by point over the same ground. Any stick is good enough to beat a dog with, and any objection is good enough to make against those who are sacrilegious enough to attack the old logic. Dr. Schiller follows the order of the text-books, and shows that as to the intention and extension of terms, as to the categories, the predicables, as to definition and classification, in the elementary part of logic, the truth holds good throughout, that none of them is valid or is of any use without reference to their several purposes on the occasion of using them. In treating of judgment, he shows how the process of judgment is not, as logic pretends, a process of juggling with words, regardless of the purpose of the argument, but a process of selecting what is relevant to the purpose of the argument and rejecting what is irrelevant.

In his examination of the so-called laws of thought, Dr. Schiller goes far deeper than I do. I content myself by taking them at their face value, and showing that, so taken, they are not laws of thought at all, but empty and silly truisms. Dr. Schiller enumerates with great ingenuity all the various meanings that may be read into them, and shows that whatever meaning we take, it lands us at last in an absurdity. The examination of these laws by Dr. Schiller is a fine piece of analysis and dialectic, and is well worth reading on that account alone. He finally shows how the validity of all our assertions, even such elementary assertions as *A* is *A*, depends on their relevancy to our purpose, whatever that may be at the time.

Examining the logical doctrine of quantity, Dr. Schiller again shows how impossible it is to affix in practice any of the quantities which logic arbitrarily connects with propositions. "The function of a proposition," he very rightly says, "is to convey a meaning. . . . If it conveys the meaning intended, it fulfils its purpose and validates its form, whatever it may be." This is precisely the same doctrine, which I express in other words, of the necessity of taking account of the purpose of the argument. Unless the meaning or purpose of a statement is taken into account, the statement is a grammatical sentence, but it is not a logical proposition. Here Dr. Schiller leaves the examination of quantity. He does not pursue the matter, as I do, with an enumeration of all the many quantities that are in use. The treatment of negation is brief, and to my mind scarcely adequate to the importance of the subject. Dr. Schiller has no difficulty in showing the ambiguity of the *A*, *E*, *I* and *O* propositions, and how the attempt to remove the ambiguity by explicitly quantifying the predicate produces confusion worse confounded, and he agrees with me that the immediate inferences of formal logic do not represent any processes of actual thinking.

The new answer that Dr. Schiller gives to the old riddle, whether

inference is an advance from the known to the unknown—whether inference gives us anything new—is that psychologically there must be novelty, but logically there cannot be novelty. If, for instance, we infer from all men are mortal that some men are mortal, the inference must at the time it was made have been made for some purpose, and must therefore have then seemed worth making. As soon as the inference is made, it must be apparent to the reasoner that he has attained nothing new, because his conclusion was implicit in his premisses, but he could not have seen this at the time he made his inference or he would never have troubled to make it. My own explanation is that the function of inference is to state explicitly what is implicit in the premisses, and this, I think, comes to much the same as Dr. Schiller's explanation.

To the syllogism Dr. Schiller attaches an importance that seems to me exaggerated. "Of all the discoveries," he says, "which man has made by dint of sheer reflection, the syllogism is assuredly the greatest." In this I should join issue with him. The forty-seventh proposition of the first book of Euclid seems to me an incomparably greater discovery than the syllogism. Here, it seems to me, Dr. Schiller has not completely emancipated himself from what I consider the superstition that the syllogism is the general model to which all reasoning conforms. My view is that so far from this being the case, the syllogism is but a small part of a sub-rule of a minor canon of one of the lemmas to one of five canons of inference, and inference itself is but one of three distinct modes of reasoning. It is the more strange that Dr. Schiller should sign and subscribe this certificate to the value of the syllogism, since he devotes the chapter that opens with this declaration to a cruelly destructive analysis of the syllogism. The most valuable part of this analysis seems to me to be the endorsement of Mr. A. Sidgwick's discovery that the middle term of the syllogism may always be ambiguous. An ambiguous middle always vitiates a syllogism, and since the middle may always be understood in more than one sense, there is no guarantee that the syllogism can ever be valid.

The crux of traditional logic was, and is, the origin and validity of its premisses. It was on the nature of universals that the endless discussions of the schoolmen turned. Dr. Schiller shows exhaustively that there are three possible grounds for the universal. It may be founded on intuition, on generalisation, or on postulation. He has no difficulty in showing the worthlessness of intuition as a basis. A universal founded on generalisation may be founded on a complete generalisation, that is to say, one that includes every possible instance, such as Every month in the year has less than sixty days; or on an incomplete generalisation, in which some instances only have been examined, such as Every tree has roots. Dr. Schiller says that the examination of the cases can never be assumed to be either exhaustive or correct, but in this he seems to have gone too far. There are many cases in which the number of instances is small, and every instance is known, such as that already cited of the months, and such universals as Every member of Parliament sits for some constituency, Every animal confined in the Zoological Gardens is fed by man, Every house in this street has a bath-room, and so forth. In such cases the examina-

tion is both exhaustive and correct, but in such cases the syllogism is worthless on account of question-begging. When the generalisation is not exhaustive, the syllogism is worthless because it is invalid. The true origin of universals is, in Dr. Schiller's opinion, postulation, and this is the conclusion at which I had arrived independently, and on quite different grounds.

"Inductive logicians," says Dr. Schiller, "have usually been in full and conscious revolt against the tyranny of the syllogism. Nevertheless it is a curious fact that they have always succumbed to its fascination. One after the other they adopt again the ideal of formal logic, and try to represent inductive reasoning in the guise of a formally necessary type of valid inference." This is the charge that I also have brought against logicians of the inductive school. They constantly try, as I put it, to put the new wine of scientific discovery into the old syllogistic bottle; and the bottle always bursts. I think that inductive reasoning should not be called inference, but I should contend that inductive reasoning, as I understand it, does, or may, lead to conclusions that are formally necessary, if by formally necessary we mean necessarily accepted as true. Of course, all depends on what we mean by induction, and this is a matter to which Dr. Schiller gives more attention than any other logician known to me. He distinguishes four Aristotelian meanings, a Baconian meaning different from them all, and Mill's meaning, which — and here Dr. Schiller agrees with me — is merely the discovery of causation. That this is a wretchedly incomplete and inadequate concept of induction is insisted on in my logic; and Dr. Schiller shows that even in this very limited, though certainly important, sphere, Mill's canons are utterly inadequate. In order to apply them at all we must already possess so much knowledge as would render their application unnecessary. What the real method of discovering causation is, Dr. Schiller sets forth in terms which seem to me conclusively satisfactory.

A long chapter is devoted to analysis of the concept of causation, a subject that has engaged the attention of philosophers at least since Hume. Dr. Schiller's analysis is extremely acute and convincing, but in my opinion the subject is not properly within the domain of logic. It pertains to philosophy, and although no doubt it is within the province of logic to discover and explain by what process causation, supposing there is such a thing as causation, is in practice discovered, it is no more a part of logic to show what causation is than to show what co-existence or succession is.

It is interesting to find that Dr. Schiller, analysing the traditional fallacies from the psychological standpoint, arrives at the same conclusions as I do, criticising them logically. We agree that the material fallacies are, in formal logic, illogical excrescences and superfluities. They are intruders, and have no business there. Nevertheless, they certainly pertain to logic, and hence formal logic stands convicted of illogical limitation.

The general conclusions at which Dr. Schiller arrives are that formal logic has completely dehumanised itself, and is for ever divorced from every actual problem of science or life; that it is devoid of meaning; that it is an irrational pseudo-science; that it is worthless as a mental

training ; and that the best that can be said for it is that it is a good game for intellectually-minded men. In all this, except, perhaps, the last particular, I should heartily agree.

When Dr. Schiller goes on to expose the malign effects of logic on society, on mental training, on science, on religion, and on mankind generally, he seems to me to exaggerate its importance and its influence. In as far as he deals with the past, now fading into distance, much of what he says is no doubt historically true ; but at the present day, logic, as it is taught in the text-books, has scarcely any influence at all. No one studies it except at a university. No English university but that of Oxford gives it any prominence, and even at Oxford, only a minority of the students are required to study it ; and of those who do study it none but an insignificant remnant pay any attention to it, or fail to discard it altogether as unworthy of consideration, the moment their novitiate is past.

It is not uninteresting to compare two books so nearly identical in aim as Dr. Schiller's and mine, appearing simultaneously and unexpectedly without collusion or agreement on the part of the writers, or even knowledge of either that the other was engaged on a similar task. Dr. Schiller's book ferments with indignation, and what seems almost like a personal detestation of a personified logic ; mine is permeated by an amused contempt. Dr. Schiller's objections are psychological throughout ; mine are logical. Dr. Schiller is purely destructive ; he pulls down with remorseless fury, but he does not attempt to rebuild : my primary aim is constructive, and I pull down only to clear the ground for the erection of my own new fabric. Dr. Schiller goes much deeper than I do. I merely pull down the ramshackle old structure, and level it with the ground : Dr. Schiller digs up the foundations. Dr. Schiller shows that the form of formal logic is form without substance, and insists upon the emptiness of the forms : I take the forms at their face value, and show that, even granting that they have substance, they are worthless. Dr. Schiller speaks as a professional logician, having the whole of Greek philosophy at his finger-tips : I speak merely as a practical reasoner, having only a very superficial acquaintance with the Greek origin of logic, and, with respect to traditional logic, a mere outsider. It is the more remarkable that our conclusions should be in such close agreement as to be almost identical. It is the more remarkable that these, the first thoroughly destructive criticisms of the logic of tradition, should so completely harmonise with each other.

C. A. MERCIER.

A New Logic. By CHARLES MERCIER, M.D., F.R.C.P., F.R.C.S.
London : William Heinemann, 1912. Pp. 422. Price 10s.

A review of this volume will appear in the July number of the *Journal of Mental Science*.

A Tale of Hallucinations and Impulses.

A short time back I received from a friend a book, which he had picked up at a bookstall for twopence. Seeing in it things that he thought might interest me, he was kind enough to forward it. I, in

my turn, having found many things to interest alienists and psychologists, have made extracts from it for reproduction in the Journal. It is one of two books, the other being entirely unknown to me, which were written with the same objects—to expose the horrible treatment of the insane and the unjust confinement after need for that confinement had passed away, to explain away much that the writer regarded as insane, to teach psychologists their business, and finally, “to take it out” of his relatives for their vile conduct in keeping him in an asylum. The case itself must be regarded as possessing many interesting phases from the clinical point of view, but its chief interest lies in the explanation of hallucinations and impulses by the patient himself. The latter was evidently a man of some intellectual power; he writes easily, he had read much, he possessed considerable power of analysis, erroneous though it frequently was, and he had the fatal habit of introspection in a marvellous degree. He came of a highly placed family, with a long pedigree. This fact in itself contributed in some degree to his irritation under treatment, insomuch as it caused him astonished pain that he should be subject to personal control by his inferiors in station. Being opposed to revolutionary measures of reform, which were very much under debate at the time, he seemed to think that that control could only have been made possible by the levelling tendencies of the age. Likewise his family was well in the forefront in opposing Catholic emancipation, and this, no doubt, had a good deal to do with his religious ardour and with the various mental phenomena connected in his case with his beliefs. There is no evidence of hereditary predisposition in the direct line, but he had one female cousin of unsound mind. These many years after one can say that there are signs of eccentricity at least in a prominent representative of the family. The patient was born, as far as I can make out, in the year 1801, and not many years after there was an event in the family which might have had some effect on his young and impressionable mind. He evidently had an attack of syphilis at about the age of twenty-eight.

With regard to the writings themselves, it has been a little difficult to arrange them in sequence in a satisfactory manner, some being founded on notes made at the time of extreme insanity, others written after the acute symptoms had disappeared, while others, again, were written several years after; but although it is evident that he was not of sound mind and judgment, incidents in the history of his treatment call forth many pages of philosophical and recriminatory reflection. One has therefore to receive what is said with some caution, for not only had his memory and power to reproduce with correctness his ideas, formed at an earlier period, to be considered, but it is quite evident that his mind, at the time of writing, was not only partially unsound, but also tinged by the spirit of aggressive opposition which existed all through the attack and probably from the very earliest moment of reasoning. Still, there is a sufficient amount of probability that he formed and entertained certain of the important beliefs stated, to give the recital some value. The extracts now given only form a fraction of the book itself, which is padded up by endless reflections on spiritual philosophy, written in language of the presumptuous and inflated style familiar to us all. The actual insanity appears to have become evident in 1830, the

crisis arising at the end of that year. He seems to have regained some sort of liberty in 1834, the date of the present volume being 1840, in which year he was living in a private house.

On his breakdown in the house of Captain H— he was removed to an asylum where he spent fourteen months, during which time he was apparently acutely insane. After that he was transferred to another institution at which he improved considerably, though evidently considered at times to be homicidal. Most of his time there was spent in contesting the propriety of his detention after he had learned how, as he thought, to keep the hallucinations in check. The following are the extracts :

I have been educated from my childhood upon the principle that I was to prefer doing my duty to seeking to please myself or others—to tell truth and shame the Devil. At school I was taught to admire and to aspire to the self-devotion of the Decii—of Quintus Curtius, of Mutius Scaevola, of Brutus the father. Afterwards I entered a profession in which I considered that I pledged myself to yield my life whenever I might be called upon to sacrifice it, and I subsequently devoted my attention to the study of a religion which teaches the followers of it that through much suffering they are to inherit the Kingdom of Heaven, and the Founder of which had thus spoken : “ Unless ye hate father and mother for My sake, ye cannot be My disciples.” The severe habit of thought thus inspired may have hardened my feelings, inasmuch as I have found that in every sense it is true that charity begins at home, for how can he show mercy to others, who shows no mercy to himself ?

Often, when a lad, sitting alone by the side of a pond with my rods and lines, I have heard my name loudly called from the surrounding trees, and, looking round, I have said to myself, “ I have mistaken another sound for the calling of my name ” ; or I have said to one of my sisters, if she was by, “ How like that was to my name.”

At the commencement of the year 1830 I was proceeding to the continent on a visit to one of my brothers, who was at Ghent. It so happened that I was very anxious whether I should cross from Margate or Ostend, or go to Dover to join a friend, and from thence with him through Calais and Dunkerque and Belgium. I was alone in the coach on my way to Canterbury, and I knelt down for guidance, unable to determine for myself, and I prayed in an agony the Lord's prayer. Whilst praying, I saw a vision of three countenances in travelling caps, which succeeded one another. At the appearance of one of these countenances I shuddered with horror, but my mind became troubled, I was astonished—I seemed to doubt at which I had shuddered—I became disturbed, and it seemed to me that in consequence of my being so puzzled and doubting, the vision was taken away. I resumed my seat in the coach, wondering and stilled. I resolved at length when I left the coach at Canterbury to go by Margate. I got into the coach at night ; we were delayed a great deal by the snow, and when daylight came I saw in the coach with me two young men with travelling caps such as I had seen in my vision, and the features of one of these young men, who was a German, were exceedingly fair, mild and regular, with yellow hair, such as I had seen

in the vision. I was puzzled, when seeing the vision, to know whether I had shuddered at seeing this young man or at the sight of another, and I had thought to myself, "Can there be any evil in one so beautiful?" And again I suspected I had offended the Almighty by supposing there could be evil in him. When I made acquaintance with my young fellow-traveller, I found that he was a well-disposed, honest young Calvinist, who, though young, had thought seriously. I looked among the other travellers by the coach for the third cap. No one wore anything resembling it; but after I had descended, in the morning, into the cabin of the steamer, a very strange and singular man came down, and I recognised on his head the other cap I had seen in the vision. This gentleman, from the moment he entered, made use of the most horrid oaths, scarcely opening his lips without one, until I ventured to reprove him, and, after a short argument, he gave up making use of them, for he was a gentleman, and we were on good terms afterwards. I was subsequently informed that he had been of unsound mind. He was certainly very wild.

I have an impression that I saw, on another occasion, a similar vision, of which I do not recollect the particulars.

After these visions, which made me more disposed to listen to the accounts which reached me of certain miraculous gifts to individuals of the church of Scotland, in the neighbourhood of —, and — in Scotland, when I had been some time at —, attending meetings of these persons, a power came upon me of chanting words of Scripture and words of spiritual exhortation without premeditation. I also felt myself impelled to address persons whom I did not know before with passages of scripture that arose in my memory; on one of those occasions, without my being aware of it, one of the party was a young lady to whom I had promised to communicate the result of my investigation into the truth of the above miracles. About the same time, when I was at the manse of —, one day the spirit of —, one of the inspired persons in the neighbourhood, seemed to come upon me, and directed me to leave the room and kneel down in prayer; this was the first time that I felt myself guided as by a visible or palpable spirit. At the same place and in Dublin, passages of the Old Testament were applied to me, which I turned to by the direction of a spirit, in which I was threatened with the most dreadful punishments and with madness if I were not faithful to the guidances which were given to me; again, in Ireland, when I was attending a meeting in behalf of a Bible society at which I had promised to speak, my hands were guided to seek for passages in the New Testament, which I opened in a consecutive order in support of the line of argument I designed following. Later, in Dublin, I had warnings of evil of another kind, and when I was ill my hand was guided to write in a style unusual to me. Then, also, I often yielded my limbs to be guided by influences which came upon me, which seemed to me like walking in a new life; on one occasion particularly, after my friend Captain H— had rebuked me for my room being in disorder, I was very much grieved, and when he had left the room a spirit came upon me, and in obedience to it I began arranging the room and putting my clothes in order in the wardrobe. On another occasion whilst I was undressing to go to bed, I was taught to assume graceful attitudes of

different kinds, chiefly of adoration, and at one moment to understand myself in spirit to be as St. John the Apostle, at another as Judas, and this depended upon a turn of thought, to me unintelligible, at which I became so alarmed and troubled that the spirit or influence guiding me seemed to vanish, and I exclaimed or chanted sorrowfully, and by inspiration, "Oh, where is my beloved gone?" When I was likened to St. John the Apostle, I saw my countenance and form in the glass fair and bright, but when I was likened to Judas my face was dark; whether this arose from any internal operation of the mind, by which the visual organs were affected, or from my face being accidentally in the shade without my observing it, I do not know; the first is most probable, because afterwards I saw the countenance of others thus change from light to dark when in the same position relative to me and the light, but they appeared more black, and I was then more weak.

Only a short time before I was confined to my bed I began to hear voices, at first only close to my ear, afterwards in my head, or as if one was whispering in my ear, or in various parts of the room. These voices I obeyed or endeavoured to obey, and believed most implicitly, especially after my mind was entirely deranged. I understood them to be the words of the Lord or of His spirits. Afterwards, when I was very faint and ill, I saw visions of various kinds, the countenances of my friends and relations, now white, now red as in flames—venerable countenances with flowing locks and silvery beards—the hand and arm of death stretched over me, and processions, beautifully delineated, like those of the ancient pagans.

On Sunday, the 19th of December, 1830, having recovered from my illness, I was taken by Captain H—, my friend, with the consent of Dr. —, my physician, and surgeon to the — Hospital, for change of air.

I spent the greatest part of that day with Captain H— and his family. Conversation turned, or was directed by me chiefly, to the — miracles. I asserted as before my belief in them, I tried to persuade others; I informed the family of many things I had experienced and witnessed in Scotland and since I was in Ireland. My conversation, and moreover my manners, alarmed them. I passed the night in the — Hospital, where Mrs. H— had been so kind to provide me with a bed. It was a night of horrors and alarms.

The next morning I breakfasted with Captain H—. I was directed by *some spiritual power* to pray for leave to be left alone in the parlour for half an hour, when the family retired to the sitting-room, and Captain H— went out on business. They objected, but I insisted upon it, and they consented.

I was directed by the *spirit* I mention to place myself for a quarter of an hour in a particular position, looking to the clock, if I remember correctly, after that to throw myself on the ground and to lie with my mouth close to the floor.

I lay there for a quarter of an hour more, supposing it to be at the command of my Saviour; much occurred, but at last I was interrupted by Captain H—'s entrance, who found me rising and helped me from the ground, on which I had slobbered from my mouth in my agony.

My conduct was irregular before him, for I thought I was to speak

before him and his family in an unknown tongue (*and to make some confession before them which I was unwilling to do if I recollect correctly*), but which I was about to do, when I hesitated upon Captain H—'s sitting down to write a letter, as I feared to interrupt him; we were going into town together in a coach, and he was ready and pressed for time. I therefore determined to defer my confession or utterance with a tongue until the evening ultimately; but found that Captain H— would not be at home nor Mrs. H— but only his daughters, so that I should not be able to call with propriety. I believe I intended to have returned that evening to see them and bid them adieu, to surprise them at the same time with joyful tidings of our Saviour's being upon earth, in spirit at least, preparatory to His near and second coming, with an account of His mercies to me in having pardoned and healed me and restored me to full health, at the same time that I gave proofs of my own divine authority.

I drove with Captain H—into ——. I had, or believed that I had, done something to provoke the Lord. I was ordered to make certain confessions to Captain H—, which *I shrunk from*. (*I believe, however, that I attempted to do so, but not in a manner to satisfy the spirit which commanded me.*) *I heard audible and articulate voices, though not always.* I either met Dr. — by appointment at my inn in — Street, or Captain H— asked me to remain indoors whilst he fetched him, and he called before or with Captain H—. I believe I was then left alone for some time, which opportunity I took for prayer and meditation. I know I saw Captain H— a second time.

I then was proceeding out of doors, supposing myself well, to buy a new hat I think, or to do some commissions preparatory to my journey next morning, or in a day or two to England. Earnestly wishing, with or without Dr. —, leave to see my mother at —, and pass the Christmas with her, or to proceed to Oxford; but on opening the door, or, as I was proceeding downstairs (if I remember correctly), I found, or met a servant, sent from Dr. — to watch me and prevent my going out.

Captain H—, I think, arrived with him, or soon after, and explained that he was a confidential servant of Dr. —, whom he had requested the doctor to send to watch me.

From this cause I derive my misfortune. I do not think *I should have gone mad if my friend had not done this*. I do not think he was justified in doing so, but he acted with promptitude and resolution, and perhaps from experience, for he had himself been delirious once, from the use of mercury. *It is true I was* in the habit of hearing articulate voices, and of obeying them, but I had not done so yet without judgment and much deliberation, neither had I attempted to do myself or anyone else any injury, *nor had I done anything* except in my friend's house calculated to make me seem *ridiculous*, if I except praying *with a loud voice, which is a nuisance to others, I know*, and now I am sorry for having done it in a *crowded city*, without respect to my landlord or my neighbours.

But his very presence confused a weak, disordered and enthusiastic conscience, for I did not know whether I shrunk from doing things because I feared his ridicule and laughter or condemnation, or because it was really my duty from motives of prudence and discretion.

I was, therefore, ultimately tempted to do before him, by his very presence, things which I should not most likely have been tempted to do in his absence. I did them not out of bravado, but conceiving them my duty, and that my hesitation proceeded from the fear of man.

I could not explain to him my motives except partially. I was afraid at that time and thought it profane to mention that I heard voices which directed me to do these things.¹

It is not improbable also that I might have been tempted to acts from delusion, which might have rendered it expedient for me to be watched, subsequently, not, however, I think at the risk of depriving me altogether of my understanding.

I, with some difficulty, persuaded my servant to leave me for half an hour to pray in the evening when I went to bed. This, as also his not retiring when I undressed, *terrified me*. I was before shocked, provoked and amazed.

Different things occurred, to be mentioned hereafter. Ultimately about midnight, or one or two o'clock in the morning, I attempted to throw myself on the back of my head, till I had twisted my head in a particular way.

I had not courage to do it completely; I feared to break my neck, but I was not sure whether *that was not intended*. I thought if I broke my neck in one way it would not kill me, but that I should be delivered from various demons, but that if I failed I might break my neck and suffer merely pain, and perhaps die, but in either case I expected to be raised to life again, to be the messenger of the Lord's second coming.

My servant attempted to prevent me from getting from under the bedclothes to do this, but I tore my shirt from him and persisted, earnestly telling him for my soul's sake and for motives which I really had, to let me alone; I believe he tarried some time and then went downstairs for help. Another servant came up, and soon after I was fastened by them in a strait-waistcoat with my hands tied over my breast.

Next they tied my feet to the foot of the bed. I now became very feverish and thirsty; I was in a situation of mind bordering on distraction. For I could not tell them, I thought it ungrateful to reveal it to them, that my Saviour, as I imagined, was holding communion with me or rather addressing me. I began to be subject to all kinds of delusions, I dared not open my lips to them, partly through superstition, partly through delusion.

This confinement, after about a fortnight's illness, produced not only derangement and delirium, but torpor of *blood* and loss of moral courage and energy. *I lost my reason in a struggle of conscience under delusion afterwards*. I am sure I should not have done so if Dr. — had done his duty to me, *as a brute animal even*, needing wholesome air and exercise. I foresaw daily my horrible fate, without being able to redress myself because *I could not explain to them my feelings or sentiments*. At last I sunk under it. It was like fear in a horrible dream which one cannot escape from.

¹ But there is nothing really ridiculous in this, unless to the unfaithful, if it be done in time and place. *Our Lord* prayed with *strong cries* (see Hebrews, v, 7), but it is not probable that He did it in cities, for He went into the country or wilderness with His disciples, and there even retired from them.

I remember hailing the hour when I saw my eldest brother by my bedside ; he knew my particular turn of mind. He and I also were in some points of the same religious opinions. Dr. — was, I believe, an unitarian, therefore, as I conceived, an infidel concerning the Holy Ghost. My eldest brother had also by letter expressed to me his belief in the — miracles ; though he retracted his acknowledgment afterwards in another letter, I hoped to be able to persuade him to treat me as a reasonable being.

I do not know how these hopes afterwards vanished ; I believe some answer he made me showed me that he was futile and vain and presumptuous ; he became the object of my hatred and scorn, and, as I *conceive*, my betrayer, for I trusted, in my imbecility, to him.

I remember now, after my brother's arrival, I was forced by my physicians, in my brother's and the servant's presence, to use a clyster. This disgusting operation I had a peculiar dislike to, from its indecency and indelicacy. My opinion was not asked about it, neither my wishes consulted, and my dumb, mute state of lunacy was considered in this a reason for making no scruple of offending my feelings of delicacy, as in regard to my other regimen it had been perverted into a reason for treating me without any reference to my wants as a brute.

Nothing did I require but wholesome diet, moderate and healthy exercise and pure air, instead of which I was drenched with the most nauseous medicines against my will and against my conscience. I was fastened in a strait-waistcoat, or huge hot leathern arm-cases, and compelled to lie day and night in the same bed and in the same room, and fed on slops of bread in broth.

And all this for what ? Because I had attempted one night to injure my person, as they supposed, and had tried it once or twice again. Also because I could not speak from lunacy, and from feeling sure that none of them would receive or believe what I said.

(Letter from a sister.) — never heard of any operation from Dr. —, except once bleeding from the temporal artery when you were considered to be in a state of plethora, of which, by the way, Sp—r, when he had visited you in the spring, mentioned that you had the appearance —a more than usual redness and fulness about the face. — did not hear of the operation from Dr. — till after it had been performed, and was then told by him, that though more painful than bleeding from the arm, you had borne it patiently, and that it had so beneficial an effect at the time as to be followed by a lucid interval, in which you expressed a strong hope of your recovery.

These voices commanded me to do, and made me believe a number of false and terrible things. I threw myself out of bed, I tried to twist my neck, I struggled with my keepers. When I came to Dr. — I threw myself over a stile, absolutely head over heels, wrestled with the keepers to get a violent fall, asked them to strangle me, endeavoured to suffocate myself on my pillow, etc., threw myself flat on my face down steep slopes and upon the gravel walk, called after people as my mother, brothers and sisters, and cried out a number of sentences, usually in verse, as I heard them prompted to me—in short, for a whole year I scarcely uttered a syllable or did a single act but from inspira-

tion, though I now know that scarcely one of the things I said, or one of the things I did, was what I intended to perform.

During this year, also, I heard very beautiful voices singing to me in the most touching manner, and on one occasion I heard the sounds of the cattle lowing and of other beasts in the fields convey articulate sentences to me as it is written of Balaam. On another I was threatened terribly by the thunder from heaven—in short, nearly all sounds that I heard were clothed with articulation. I saw also visions, and the same day that I heard the cattle addressing me, on looking up into heaven as I was leaving Dr. —'s premises, I saw a beautiful vision of the Lord descending with all His saints. During the same year I also saw the faces of persons who approached me clothed with the features of my nearest relations and earliest acquaintance, so that I called out their names and could have sworn, but for the immediate change of countenance, that my friends had been there. As they were walking at some distance their stature also changed.

I recollect that even at the height of my delusions I refused to obey these voices on several occasions, when by obeying them I was afraid of taking away the life of my attendants. For instance, I was often desired to push a man named — backwards into an empty bath, but I was afraid to do it lest I should injure him. I also often, through disappointment and rage through fatigue and despair of comprehending them, rebelled against them and refused to do anything, choosing melancholy, sulkiness and inactivity, or my own will. On another occasion, being desired to throw myself over a steep precipice near the river —, with the promise that if I did so I should be in heavenly places, or immediately at home, I refused to do so for fear of death, and retired from the edge of the precipice to avoid the temptation, but this last was not till after repeated experiments of other kinds had proved to me that I might be deluded. For I was cured at last, and only cured of each of these delusions respecting throwing myself about, etc., etc., by the experience that the promises attendant upon each of them were false. When I had fairly performed what I was commanded, and found that I remained as I was, I desisted from trying it with any sincerity and soon left it off.

I was tempted to do these things very often from hearing the voices tell me that my fellow-prisoners were suffering for me, and that if I did so-and-so I should relieve them; but at last I was warned a change would take place in my situation, and when the voices one day said to me, "Mr. — is suffering or suffocating for you," another, or the same, voice added, "To think of, or to reflect on with shame and contrition too," or words of that kind, then my mind began to have peace, and I began to breathe again. I knew I had been deceived, and when any voice came to order me to do anything, I conceived it my duty to wait and hear if that order was explained and followed by another, and, indeed, I often rejected the voice altogether, and thus I became of a sudden from a dangerous lunatic, a mere imbecile, half-witted though wretched being; and this was the first stage of my recovery.

This took place in the cricket season about six months before the end of the year 1831, and the consequence of it was that during the day I was released from my fastenings, though not at night for a long time

after. My limbs being more at liberty, having more exercise, more occupation, more amusement, my health and tone of mind soon made rapid advances towards restoration ; and though afterwards I once struck my keeper and one of the patients, it was from ample provocation and not from delusion or insanity. From this time, in truth, I needed nothing but observation, and not coercion.

It is curious, and it is contrary to the theory of the doctors, who deprecate all excitement among their patients, that every dispute and struggle I had with those controlling me served to strengthen my mind and dissipate my errors. Particularly that occasion on which I struck the keeper — upon his attempting to collar me and force me to come and be shaved. I cannot recollect accurately whether then I had already begun to reason with myself how often I had been deceived through life in adopting upon trust the opinions of others, and in following the fashions and habits of society ; and I determined, when I was released from confinement, to do nothing whatever which I could not prove reasonable, and among other things, as more consistent with nature and reason, I resolved to wear my beard and long hair. I had no sooner come to this resolution than the voices I used to hear taunted me with cowardice and subserviency to those around me in not putting it into instant execution, on account even of the filthy manner in which I was shaved, and I was made to feel that I was guilty of gross ingratitude to my Saviour in not insisting upon my right to do this in spite of any opposition that might be made to it. The consequence was that I replied in thought to these voices, "We will see if it is so," and I was soon after engaged in a desperate struggle with the keepers in support of my right. My spirits were completely roused by this affair, and I gained a self-confidence and a liberty of thought for a long time lost to me. The absurdity of my Saviour having desired me in such circumstances to expose myself to such disgraceful treatment was self-evident, and my resolution became the stronger to exercise a great control over myself, and cautiously and steadily to resist being led away again into any situation of difficulty by these voices. Still, however, I fancied the voices were holy, sent to try and to instruct me, and that I was bound to respect and pay attention to them ; but I was no longer afraid of being led into any danger by obeying them, though I thought that I might expose myself to ridicule.

I may say that every syllable of these letters I saw by illusion on the paper before I wrote them ; but many other sentences also appeared besides those which I chose, and often these sentences made light of, or contradicted, what went before, turning me to ridicule, and that ridicule goading me to anger and madness, and I had great labour and difficulty to collect myself to seize those that were at all consecutive, or not too violent or not too impassioned. This was extremely painful. My readers will find in these letters a great deal of sense and forcible writing, mixed with a great deal of weakness and imbecility ; thus the inspirations and guidances I have received have been often good and becoming, and therefore I conceive, in the sense in which the term is usually employed, divine ; often they were defective, and much my judgment ought to have rejected, and probably would have rejected in calmer circumstances.

On one occasion, shortly before I left Dr. —, as I was leaving the house and walking through a back gate, I was desired by the spirit to “lift up my head and open my voice, and see what I should see,” and I looked up to heaven and yielded my voice to the power upon me, and forthwith I uttered horrible oaths and blasphemies, so that I was frightened, and refused to speak. Again I was desired to lift up my head and open my mouth as before, and I did so, looking up into the sky, and forthwith I uttered the most gross and revolting obscenities, by the influence of a similar power, and I again chose to be silent rather than to obey. I was thus cured of my folly that I was to yield my voice up to the control of any spirit at hap-hazard, without regard to circumstances.

My loss of all control over my will, and belief, and imagination, and even of certain muscles, was immediately preceded by three successive crepitations, like that of electrical sparks in the right temple, not on the same spot, but in a line one after the other, from left to right. Before I left Dr. — I thought I observed that the cause of that delusion, whereby the stature of persons appeared to change, consisted in my comparing them in the agitation of my spirits, and in that weak state of health, solely with the objects around them or in the distance, in the same way as I have often found when attempting to draw, I have made all the objects in the middle distance in fair proportion one with the other, but much too large to sort with the size I was compelled to give to the objects in the foreground on account of the dimensions of my paper. I will not, however, be too positive of the cause being rightly stated, though I think it was so: but this I know, I was aware before I left Dr. — that this delusion arose from a defective use of the visual organs. This weakness of sight giving also a kind of unsubstantiality to persons I saw—for their forms seemed to dilate and contract—did, I have no doubt, contribute to a delusion I was under, that I was surrounded by spiritual bodies, and myself in such a body, not of flesh and bone, and not needing sleep or food.

Let me observe that the voices I so often speak of were mostly heard in my head, though I often heard them in the air or in different parts of the room. Every voice was different and each beautiful; and, generally, speaking or singing in a different time and measure, and resembling those of relations or friends. There appeared to be many in my head, I should say upwards of fourteen. I divide them as they styled themselves or one another into voices of contrition and voices of joy and honour. Those of contrition were, I think, all, without any exception, on the left temple and forehead; those of joy and honour on the right temple and forehead; but on each side of the head, as it were over the middle of the eyebrow, two spirits seemed always to sing or speak to a measure more quick or more flaunty than the others—that on the left was, I think, called the spirit of my eldest sister; that on the right was the spirit of Herminet Herbert. I understood the use of these spirits, which were spirits of humour and politeness, to be necessary to a holy turn of thought, and that the world did not like the use or understand the use of them. My thoughts flowed regularly from left to right, guided by these voices and their suggestions; and if I

turned them from right to left I was told that I was playing the hypocrite. I think it right to mention this because it was always so ; and though it may appear fanciful, there may, nevertheless, lie hid some truth in it connected with the nervous system which I cannot venture to explain. Amongst the names given to the spirits were those of Contrition, those of Joy, of Gladness, of Joviality, of Mirth, Martha (by which I understood over-anxiety), and Mockery, of Honesty, of Sincerity, and, amongst others, a spirit of honourable anxiety to do my duty to the best of my own satisfaction, which I was told was the spirit of one of my sisters—the use of such a phrase is evidently humorous, or ironical, or satirical.

The following observation may also not be unworthy of attention. When I was confined in my strait-waistcoat I used to get up and sing and behave noisily. I used then to consider what was my stimulus to action, for often I had no external motive or object, and I found it was to get rid of two uneasy sensations in the roof of the mouth ; the one at the back of the palate consisted of a dull heavy impression, as if made by a thick mucilaginous spittle ; the other was more painful, and about the top of the throat, as if the breath came up very fiery, and impregnated with electrical matter. I conceive it probable, therefore, that nature prompted me to action to relieve an over-heated system, and to purify a stagnated state of the blood and humours. This was usually on days when I was not taken out to walk after dinner. Then I was most boisterous—bumping up and down upon my seat and crying out or singing.

On one of these occasions I contrived to get out of my bands and I undressed, and ran naked, by order of the voices I heard, into a small yard attached to our prison, singing, in Portuguese, the following lines, which were inspired to me at the moment. I transcribe them as one of the most singular specimens of that nature of inspirations that often came upon me.

“ Meu amo, ti amo
Com amour fedele :
Mas nao posso senao
Ser desobediente
As teus ordems,
Porque os meus amores
Sao mais fortes
Que os teus ardores
Para mim.”

The translation of these words is as follows :

“ My master, I love thee
With a faithful love :
But I cannot but be
Disobedient
To thy commands,
Because my loves (or affections)
Are stronger
Than thy ardent love
Towards me, towards me,
Than thy ardent love
For me.”

It was not till the year 1834 that I understood the purport of these

lines. Since my restoration to liberty "I have pondered over many of these things in my heart"—with much bitterness of spirit, however, and not often in the humble and patient disposition of Mary. I did not know, in 1831, that the word *amo* was a Portuguese noun, signifying "master," but on referring to my dictionary, in 1834, when at Hampton Court, I found it was so. The accent also which I was obliged, in singing or chanting them, to lay on the word *disobediente*, struck my classical ear as incorrect, wherefore I questioned at the time if the Holy Spirit could prompt me to scan falsely—the jingle of words also, *nao posso senao*, was then unintelligible to me, but the word "*ardores*" I for a long time refused to recollect when thinking over the lines at Dr. —'s. This is an instance of what I mean by the power of utterance leaving me puzzled how to proceed. When I came to the word "*ardores*" I could not proceed. The voices then taunted and jeered me, saying that I knew what the word was, but that I did not choose to pronounce it, or to admit the sense of it. I pleaded ignorance, and then the word "*avores*," which in Portuguese meant *trees*, was suggested to me, and was interpreted to me in two childish ways—one that it meant the gallows trees, on which I was to be hung, according to delusions I had in a thousand bodies all over the world; the other, that it meant some "cherry trees" which the Lord in His goodness had ordered to be planted for me at home.

Thus it would appear that the Almighty has power to make a man utter sentences of a reasonable nature and words which he does not comprehend, and therefore, that the gift of tongues mentioned in Scripture may *not* be altogether false or unattainable to in these days; also, that what was a reasonable and consecutive speech to Him may have been turned to nonsense or folly on account of the disingenuousness of the instrument made use of to utter it. At the same time I do not plead guilty to this disingenuousness, neither do I deny it; it is an accusation which was often made of me in the spirit, and which I do not understand. But whenever I have been unable to comprehend the leadings of the spirits upon me I have been told that I did not choose to comprehend, which did not appear to me to be the case, but, that I *could* not comprehend. I was told also that I was insincere and seeking my own glory instead of that of the Lord, or afraid to confess the glory upon me becomingly before man, that I was unsimple, and that therefore the Lord turned me to ridicule and put me to confusion.

Now all, or nearly all, the phenomena which I have narrated, strange as they may appear, are to some degree or other familiar to all men, and such as I can, in a certain degree, recollect in myself during the whole course of my life.

Shyness is one very common species of lunacy to which many are painfully subjected. A shy man will be quite annoyed, imagining the curtain in a window is a person looking at him, and often has not power to look up to ascertain his error. He is overcome by thinking that if he moves, every eye in a room or a church will be directed upon him, and though convinced by argument that it is not so, still he cannot overcome the impression. A good remedy is to have an honest and serious occupation and to determine quietly to observe others.

The voices I heard gave me to understand that I was not to sleep;

that as a spiritual body I did not need sleep ; and that if I slept, I ran a risk of increasing the dreadful lethargy which rendered me unable to resist any degrading or mean thought or feeling presented to me. I was to lie awake and endeavour to understand the directions given to me. Weary at length and unable to comprehend these commands I sought for sleep, and recollecting what my mother had formerly told me of my father, that he used, when he found himself unable to obtain rest, to keep continually counting to himself, I tried the same. But then the power of thinking numbers for myself was taken from me, and my mind or life lay in my body like a being in a house unable to do anything but listen to the sound of others talking around him, and voices like the voices of females or fairies, very beautiful, very small, and with a rapidity I cannot describe, began counting in me and entirely without my control. First one voice came and counted one, two, three, four, up to ten or twenty, then a second voice took up the word twenty, and kept repeating twenty, twenty, twenty, whilst another after each twenty called one, two, three, four, and so on till they came to thirty, and continued crying thirty, thirty, thirty, whilst a voice called out after each thirty, one, two, three, four, and so on till they came to forty, and thus the voices within me proceeded, dividing the labour between them, and so quickly that I could not possibly pronounce the numbers.

During the conversation which ensued (with his two brothers), I was offended by their tone and argument, and I was on the point of striking one of them, when suddenly I saw their faces shining like gold, and a voice cried to me, "Touch not mine anointed, and do my prophets no harm." I was subdued and resumed my silence, wondering at the ways of Providence, that should allow his prophets to be so blinded, and to be so guilty of injustice.

Having at length, with difficulty, succeeded in obtaining a private sitting-room, I soon reaped the advantage of my comparative quietness. Here it was that I discovered one day, when I thought I was attending to a voice that was speaking to me, that, my mind being suddenly directed to outward subjects, the sound remained but the voice was gone ; the sound proceeded from a neighbouring room or from a draught of air through the window or doorway. I found, moreover, if I threw myself back into the same state of absence of mind, that the voice returned, and I subsequently observed that the style of address would appear to change according to the mood of mind I was in. Still later, whilst continuing these observations, I found that although these voices usually came to me without thought on my part, I had sometimes a power to a certain extent to choose what I would hear. I had observed at — that the thunder, the bellowing of cattle, the sounds of a bell, and other noises, conveyed to me threats, or sentences of exhortation, and the like ; but I had till now looked upon all these things as marvellous, and I had been afraid to examine into them. Now I was more bold, having discovered so many deceits that had been practised on me, and being more desperate, and even reckless of ever being able to attain to an understanding of the guidances which I had imagined that the Lord had sent to me.

I discovered, and I think very nearly in the manner I have stated

above, the nature of this delusion, and, prosecuting my examinations still further, I found that the breathing of my nostrils also, particularly when I was agitated, had been and was clothed with words and sentences. I then closed my ears with my fingers, and I found that if I did not hear words, at least I heard a disagreeable singing or humming in the ears, and that those sounds, which were often used to convey distinct words and sentences, and which at other times seemed to the fancy like the earnest cries, or confused debating, or expostulations of many spirits, still remained audible; from which I concluded that they were really produced in the head or brain, though they appeared high in the air, or perhaps in the cornice of the ceiling of the room, and I recognised that all the voices that I had heard *in* me had been produced by the power of the Deity to give speech to sounds of this nature produced by the action of the pulses, or muscles, or humours, etc., in the body, and that in like manner all the voices I had been made to fancy outside of me were either formed from or upon different casual sounds around me, or from and upon these internal sounds.

Strange as it may appear, I believe that there are few persons living who have not, during the course of their lives, been aware of this phenomenon; I suppose there is scarcely a child breathing that has not, at some time or other, imagined that he has been called by name when no one was present.

But the truth is, there is no mistake; the person called does really hear his name called by a power the Deity has of causing any sound to appear to articulate or speak, but when our blood is in healthy circulation, and the mind and body healthily occupied, we throw off the impression, and cast it aside, and take no further notice about it.

I have found that whenever my bodily health has been deranged, particularly whenever my stomach has been affected, I have been more than usually troubled by these fancies, particularly if at the same time, through sluggishness or through cold, I have not been breathing through my nostrils, or drawing deep breaths. The ancient prophets also, and the first Christians, particularly the Apostles, were men who went through severe exercises of fasting, watching, and prayer, by the latter of which the imagination is excited, and the mind fatigued and exhausted. St. Peter saw the vision which was to teach him to receive the Gentiles whilst fasting on the top of a house, where, through weakness, he fell into a trance; such men, being fishermen also, and therefore prone to superstition and to believe in wonders, were likely to see visions, and to hear warning voices. So also, St. Paul, when terrified, being deprived of his sight by the lightning. The mind was prepared for receiving the commands supposed to be divine by the castigation of the stomach, with which the nerves of the brain are so intimately connected, and by terror. In these days, and in this nation, probably all these inspired persons would have been consigned to the madhouse, as it is probable Ezekiel was by his nation, of which the spirit forewarned him; and in these days all these phenomena are actually classed by physicians in medical works under specific names as diseases of the sight and of the hearing.

When I had been thus far freed from my delusions, and delivered from a blind and superstitious respect for the mental phenomena by

which I had hitherto been influenced and misguided, the voices directed me to declare that I was of sound mind, and reproved me as acting with false humility if I did not do so ; and in one sense I might have claimed to be considered of sound mind, inasmuch as whilst examining the phenomena I have here attempted to describe, I was on my guard against doing anything that could endanger others or myself, and I desired to do nothing which I had not a right to do, but to pursue strictly that course of life most likely to restore me to health of body, through freedom of exercise, and with health of body, freedom and health of mind. But I now no longer obeyed their word, and I was so scrupulous that I could not seriously claim to be considered of sound mind so long as there was one phenomenon remaining, the faithfulness of which I had not tested, and the source of which I had not discovered. I have mentioned that I used to see visions ; these visions were sent to me, as I imagined, to guide my conduct and that of others, and I was often put to great pain of mind, being invited to attend to these visions as a guidance and as a pleasure, which I found became broken and confused, by reason, as I was accused, of my want of ingeniousness, or of my presumption, or of other sinful dispositions in me, because I was a simpleton, or because, instead of being tranquil through faith, my mind was disturbed by anxiety.

About the same time, moreover, I discovered the source of this kind of delusions, or rather the means by which they are presented to the spirit. One day I entered a dark closet in which there was opposite the door a small opening to give light, and in it two or three upright bars. I gazed a short time unconsciously at this, and turning to the left I saw to my astonishment a window or opening in the dark wall which I had never observed before. Recovering from my surprise I found that what I saw was not real, but visionary, and then reflecting, I found that the image formed on the retina of the eye by the light from the opening on which I had gazed upon entering this dark chamber, appeared, by an ordinary law of nature, thrown out upon the wall which was in shadow to which I afterwards turned, in the same way as if any person gazes on the sun he will see several green and blue suns floating in the air around him. I drew from this the following inferences : that neither when I had seen persons or ghosts about me—neither when I saw visions or things—neither when I dreamt—were the objects really and truly outside of my body ; but that ghosts, visions and dreams are formed by the power of the Almighty, in reproducing figures as they have before been seen, on the retina of the eye, or otherwise to the mind, or by arranging minute particles in the visual organs, so as to form a resemblance or picture of these figures, or by combining the arrangement of internal particles and shades, with that of external lines and shades, etc., so as to produce such a resemblance, and then making the soul to conceive, by practising upon the visual organs, that what it perceived really within the body exists without, throwing it in a manner out, as the spectre is thrown out of a magic lantern.

I have said that these visions are presented to the mind through the retina of the eye or otherwise because it is the spirit that seeth ; the eye is merely an organ for communicating impressions from without to the

spirit. Often when observing objects around me in the room, I have at the same time seen miniatures of friends, or other small pictures, as it were, in my loins or other parts of my body ; and any person of a lively imagination, if he chooses, may fancy horses, churches, houses or children running with their hoops, behind him, whilst he is looking to the front. For these reasons I do not think the retina of the eye the necessary instrument for the perception of visions.

I have seen very beautiful visions both in my sleep and when awake, which I have alluded to in another volume, and in which figures, endowed with great majesty and decorum, and of exquisite grace and beauty, were combined in postures, easy, elegant and delightful, and in actions of refined voluptuousness ; were I to call it sensuality or debauchery I should not convey the idea of holiness, of innocence, and of honest merriment, of which these forms were the expression. Neither do the works of any artists that I have yet seen, excepting a few of the ancient statues of Venus, Apollo, and busts of Jupiter, manifest their character. These phantasms of silvered and venerable age, and of youth of both sexes, "*odiosa multa delicate jocoseque facere videbantur.*"

I am not sure whether it is lawful to mention these things ; and whilst I unveil them with reverence I call to mind verses of Orpheus, and the words of St. Paul : "I knew a man once—how that he was caught up into paradise and heard unspeakable words, which it is not lawful for a man to utter."

There is a natural life and an eternal life—there are things carnal and things spiritual ; it does not follow that things seen in the spirit are to be practised in the flesh. Nevertheless, it may be that we do not understand that liberty to which the Gospel professes to call us.

Had I been, or were I, master of my own faculties when I beheld these things, I might be ashamed to allude to them in a country where the worship of Juno and of Vesta, of Pallas and of Diana so much prevails above that of other attributes of the Deity ; but, although they may betray the natural temperament or disposition of a constitution which the severity of the religion and moral tone of my country curbed and extinguished, I had no choice or control but to see what was brought before me. That which I have before beheld, however, I can faintly and indistinctly recall, and I can refuse these ideas by turning to other occupations, though, at times, in spite of all my efforts, they will still haunt me. I think it probable that they are common to all men, but that the world generally reject them, being taught so to do, and fearing God, or the accuser.

At times these figures thus grouped together appeared white like ghosts, at times coloured like the human flesh ; the substance of them was as of flame, and such that they might be imagined capable of incorporation with those who gazed upon them. At the time that I first saw them I was very desperate—overwhelmed by a sense of degradation—of degradation from the high calling of a Christian, and from the glories offered by the religion of Jesus Christ below the station of the beasts of the field. I was beginning to awake from my delusions, and I was enraged and disgusted at having been deceived.

In these days first females came to me without attire ; I speak of them as if they were, for so they seemed to be, spiritual beings—deities

—perfect and lovely. My mind was silenced by their delicacy, their modesty, their winning beauty ; and I slowly relinquished those resolutions, soothed by the persuasiveness of their appearance, in which appeals to my fears and to my honour often made me only the more stubborn. I braced up my mind also to courageous and virtuous efforts, in hopes of still being worthy of conversation with such as these who deigned to come to me. I recollect when one of these creatures of flame, the express image of a female of great beauty, married to one of my friends, appeared to descend from heaven unto me, while I was lying on the grassy bank in my wretched prison yard, and uniting her spirit with my person filled me with comfort. "Surely," I thought, "she is praying for me, and her prayers are heard, and her spirit is living in me." I was then, perhaps, bordering upon frenzy or upon melancholy madness, and thus the Almighty condescended to heal by the imagination that which, by tricks on the imagination, He had wounded, broken, and destroyed.

But to return to the physical causes of these beautiful illusions. Let me observe that within the eye there is a phosphoric light which produces shades of more or less intensity, and which is sometimes white, sometimes of the colour of flame, sometimes also red. Besides this there are often black spots in the eye ; whether they arise from the bile or from defective vision I do not know. By the combination and methodical disposition of these regions of light and shade within the eye, those forms were produced to my mind which by illusion appeared to be outside of me. That this phosphoric light exists no one will doubt who recollects that in dreams he sees day and sunshine and colours of every description ; these could not be produced in the chamber of the imagination without the presence of light or fire of some kind. But when I was at Dr. —'s in my bed *in the dark*, and contentiously thinking within myself—replying to the voices about me—the motions of thoughts within me caused my eyes to flash frightfully with fire, and this often accompanied with sharp pain. I call this light or flame phosphoric, because it appears of a phosphoric nature, and I have been told that French surgeons have discovered phosphorus predominating in the brain of lunatic patients.

Thus I account for many of the pictures I have had shown to my mind, only cautioning my readers that whilst I venture to explain the means whereby these phenomena are produced, I do not question the presence of the intelligent power that made use of those means.

An example of this kind of vision occurred when I was at —, working in the garden among some currant bushes ; a female form, without habiliments, rose from the ground, her head enveloped in a black veil. I was told it was my eldest sister, and that if I chose she should rise up entirely and address me unveiled. These propositions, depending on my choice, I never understood, *and they caused me great pain and anxiety of mind* ; at length, recollecting how I had been deceived and what I had suffered, I lost my temper and replied, "She might come up if she would, or go down if she would ; that I would not meddle with the matter" ; but my mind was much disordered. At this rude reply the vision disappeared.

However, these phantasms are not always produced. I observed

also, during the slow progress of my recovery, that He who rules the imagination has the power, not only to produce written or printed words, and to throw them out upon *blank* paper, but to cover written or printed words or letters with other words or letters that are not there. This is also the case with larger objects, but not so usual. It takes place (I will not say *always*) when in reading persons put one word for another, and it generally happens in little words that will derange the whole sense of a sentence, such as *no* for *yes*, *from* for *to*, *unlike* for *like*, or in words similar, *humour* for *honour*, *quack* for *quick*, and *sample* for *simple*. When persons make these blunders in reading they immediately correct themselves and say, "Oh ! I have made a mistake" ; but, generally speaking, I am persuaded they make no mistake, but read the word which they saw, but being in good health the operation of the mind, of the muscles, or of the pulses, which cleared the eye of the film, on which the Almighty produced the false word, which at the same time He threw out apparently upon the paper, was so rapid that it was not perceived ; but my pulses, and my circulation, and the operations of my mind being unusually slow, through disease and oppression I saw and discovered the sleight that was played upon me—a trick which, until I became stronger in health, made me doubt that the objects round me were *real*, so that I threw myself against doors and walls, expecting to find that they were not there, as I have written more at large in a former volume.

I regret that, as I received the book from which the above extracts are taken only recently, there has been no time to attempt anything like a study of the phenomena of the case, especially of the hallucinations, but certain points can be shortly sketched.

One would think that such a man was bound to go wrong from the very first moment of conscious thought, unless by some very good fortune environment had come to his rescue. It is unfortunate that there is no history of his school days. Possibly he may have gone to a public school. That would seem to be the best corrective of such self-assertiveness and self-sufficiency. The daily demonstration, with physical force, that he was a conceited young jackass, might have led to some self-effacement. It could have done no harm to such a character. But as he was a member of a great family, he might, and probably did, have the misfortune to be exempt from such treatment. He went to no university, failing to make up his mind to which he would go. He entered the Army, where one might think that wholesome influence would be experienced. But the *ad hominem* treatment would have been wanting, as "ragging" in those days would have at once led to the duel. He left the Army evidently before he was twenty-nine years of age. It is noteworthy that in his school days he had become ready, and possibly eager, to become a hero and then a martyr, which state, with his morbid view of religion, formed a hot-bed for insane wrong-headedness. One would think that he misread everything that he came across, referring everything to his own self and his own ideas. Everything and everybody was wrong except himself. The next point of interest is the hallucinatory hearing of his name being called when only a boy, and long before anything like mental trouble

existed in an acute form. The passage relating to this unfortunately does not state whether the explanation given was conceived at that time, or at the later time of writing, but it has some suggestion of Samuel and Eli, whose history was well known to him. It is quite evident that the occurrence was not an accidental one, which might happen to anyone once, but habitual, and therefore demonstrative of a stage of readiness to receive insane ideas. Further, the experience was mostly, if not entirely, hallucination and not illusion. From this stage the patient advanced slowly, through unrecorded years, in the consolidation of hallucination and eventually of visual as well as auditory hallucination. The growth of each is from small beginnings, advancing in imperiousness and danger as the reasoning powers were shut off by acute disease, to again lose power as the latter receded and reason reasserted itself.

We cannot test the memory at all, though from his own account it seems to have been extraordinarily keen for incidents occurring during his most critical times, as well as for preceding and succeeding events. The affections were not ostensibly lessened, as a prodroma, for he professed warm and correct feelings towards his mother and brothers, until he fixed on them as the arbiters of his cruel fate. Then nothing could have exceeded the ferocity of his sentiments towards them. To his sisters, who did not cross his path at all, he wrote quite correctly.

A point of great importance in the whole of this case is that while it abounds with impulses and suggestions of spontaneous conduct, in each instance the patient himself gives absolutely sufficient cause for his actions, such causes being errors of mental states. To an onlooker these causes would not be apparent; nevertheless they existed in the cognition of the sufferer himself. Finally it is noteworthy that after a protracted period of the acutest mental disease, partly by his own determination to account for everything that was in him, the patient was enabled to pull himself together sufficiently to be at large, and he yet retained a very considerable amount of intellect of a high order, but marred by want of judgment. H. F. HAYES NEWINGTON.

Review of Neurology and Psychiatry. Founded by the late Dr. ALEXANDER BRUCE. Edited by A. NINIAN BRUCE, M.D., D.Sc., 1911. Edinburgh: Otto Schultze & Co.

This most useful journal is not nearly as much known among psychiatrists as it should be. It is issued every month. Each number has one or two original articles, but its great feature is the short abstracts of papers on every department of neurology that appear in Europe and America. Those abstracts relate to the anatomy, physiology and pathology of the nervous system, to clinical neurology, to psychiatry and the treatment of nervous affections. There is no journal published either here, on the continent or in America that quite fulfils the same purpose. Life being short and professional literature very long, such a summary of what is going on is what most men in our department especially need, to show them what is done elsewhere and in allied fields. No psychiatrist but should pay some attention to the general neurological

field—now so large and increasing. The abstracts are well done by the editor, the American sub-editor, Dr. Macfie Campbell, the English sub-editor, Dr. S. A. Kinnear Wilson, and a large number of young contributors to this field. The late Dr. Alexander Bruce, of Edinburgh, who founded this review purely to advance the knowledge of neurology and at great personal sacrifice to himself, was an enthusiast in the subject, an original worker who made his name well known in Europe and America, and whose premature death left a great blank in Edinburgh teaching and research. His son carries on his father's work in editing this journal admirably.

Part III.—Epitome of Current Literature.

1. Physiological Psychology.

The Psycho-physiological Effects of Light [Ueber die Psycho-physiologische Bedeutung der atmosphärischen Verhältnisse insbesondere des Lichts]. (Zt. f. Psychother., Heft 4, 1911.) Gaedeken, P.

The author here further amplifies and illustrates his views as to the effects of light (the optical effects he would now include as well as the chemical effects) in causing the seasonal periodicity of various psychic phenomena. As in the previous study, the value of the investigation is increased by the accumulation of little-known data from the statistics of the smaller and more remote countries. Gaedeken also supports his views by the interesting observations of Hasselbalch and others on the exciting effects of baths of ultra-violet light on the nervous system, respiration and circulation—effects which in predisposed subjects are doubtlessly produced by very much smaller doses.

After bringing forward data concerning the periodicity of drunkenness and suicide, Gaedeken proceeds to discuss the influence of light on mortality in insanity. He regards delirium tremens as specially favourable for such investigations, and he finds that in the psychiatric department of the Copenhagen City Hospital the percentage of mortality in cases of delirium tremens is constantly higher during the months April to July. When the cases complicated with pneumonia are left out of account this periodicity is still more marked.

Gaedeken holds that the predominant influence of the chemical rays on the nervous influence is shown by the variations between the annual suicide curve in Denmark and in Norway. In Denmark, May is the driest month, in Norway, June. In Denmark, the maximum of suicide is maintained through May and June, in Norway it is only reached in June. The increased heat in June is unable in Denmark to raise the suicide-rate beyond the level attained in May, while in Norway, the greater dryness of the air in June again indicates the influence of chemical rays.

The author also deals with the seasonal periodicity of conceptions,

especially outside marriage, the tendency of twins to be conceived in spring, the periodicity of sexual offences, etc. He displays a wide knowledge of the literature of his subject, but he unduly minimises or ignores the evidence indicating an autumnal perturbation in many annual curves of the kind he is dealing with ; this autumnal rise could not easily be accounted for by the chemical action of light.

HAVELOCK ELLIS.

The Problem of Sexual Abstinence [Zur Frage der Sexuellen Abstinens].
(*Deutsch. med. Woch.*, 1911, No. 43.) Näcke, P.

At the Dresden Congress on the methods of combating venereal disease last year the chief theme was sexual abstinence. Näcke, who was present, here deals generally with the question in its neurological and psychiatric relations. The diametrical opposition of opinion at the Congress on this question—even among authorities of great experience—was, he observes, very remarkable. An element of fanaticism comes in, he believes, to explain this divergence, while the data are always limited, and often open to criticism. Place, time, race, etc., also affect the results. It is therefore desirable that everyone should present his own experiences and results as a personal contribution to the subject and not at present attempt unduly to generalise. As regards religious and moral prepossessions, however, Näcke takes the optimistic view that these belong to the past, and that we have all nowadays reconciled ourselves to a scientific outlook in medicine.

It is necessary at the outset to define "sexual abstinence." Even this point is debated, some hereby meaning only abstinence from actual intercourse, while others mean abstinence from all auto-erotic manifestations, including masturbation and erotic day-dreams. Näcke seeks a golden mean by defining sexual abstinence as abstinence from either heterosexual or homosexual intercourse, and all their substitutes in so far as they lead up to the orgasm.

Formerly it was often asserted that sexual abstinence has no bad effects at all. That opinion, Näcke states, is not to-day held by a single authority on questions of sex. The fight is as to the quantity and quality of the bad results. On the one hand we have a number of authors—Löwenfeld, Touton, and Näcke himself—maintain that these evil results are few and slight. Another series of authors—Eulenburg, Mareuse, Nyström, etc.—hold that they are serious, complex, and frequent. Näcke proceeds to combat the views of the second group. On the physical side he sees no clear evidence that sexual abstinence can produce organic disease in either man or woman ; congestion in the genital sphere is the utmost usually found. On the nervous and psychic side there may be slight neurasthenia, headache, irritability, insomnia, etc. Further, there may be slight depression, states of anxiety, obsessions, hypochondrical and hysterical symptoms—conditions, that is to say, on the borderland of the psychoses. But even here Näcke believes sexual abstinence is only a co-operative cause. The authors who attribute importance to sexual abstinence in the ætiology of insanity are themselves, Näcke remarks, not alienists but neurologists. Näcke is impressed by the apparent absence of any evil

results of sexual abstinence in asylums, and considers that the more serious results come mostly under the notice of the neurologist. Näcke is not at present, however, prepared to assert, with Eulenburg, that women bear sexual abstinence less well than men.

HAVELOCK ELLIS.

Psycho-electric Phenomena [*Recherches Expérimentales sur les Phénomènes Psychoélectriques*]. (*Arch. de Psychol.*, Sept., 1911.) Radecki, W.

The author here takes up again the much-debated question of the psycho-physiological significance of galvanometric deflections. After a comprehensive sketch of the literature he describes the apparatus he has himself employed at the Psychological Laboratory of Geneva University, Déprez-D'Arsonval's mirror galvanometer being used for ex-somatic currents, and in other experiments a Lippman capillary electrometer; quantitative observations are impossible with this instrument, only plus or minus results being obtainable. Various series of experiments were made on groups of five to thirty persons, with a number of sensory stimuli, and experiments were also made with free associations emotional appeals, as well as with respiration, voluntary effort, and fatigue. The phenomena were studied in their physical, physiological, and psychological aspects.

On the physical side Radecki finds that during certain psychic excitations the general conductivity of the human body in relation with an ex-somatic current is changed, such change in these experiments being usually of the nature of an increased conductivity. Different kinds of psychic excitation also produced static electrical changes on the surface of the skin.

Physiologically, the phenomena were found to be very complex, owing to the play of a large number of secondary factors. Radecki concludes that vaso-motor modifications, intimately related to modifications of cardiac and respiratory rhythm, are the chief cause of circulatory changes in psycho-electric phenomena. Central innervation, under the influence of psychic excitation, increases the activity of gaseous exchanges between the tissues and the capillary blood. Such increase leads to a diminished resistance of the organism. It is held that there is no contradiction between this supposition and the theories of Aebv and Piéron, according to which galvanometric deviations are due to weakened polarisation currents. Vaso-dilatation, provoked by psychic excitation and followed by changes in the rate and pressure of the circulation, causes increased gaseous exchange and a resulting increased conductivity. In opposition, moreover, to Boris Sidis, who believes that the electromotor forces are of muscular origin, Radecki (more in agreement with Tarchanoff) invokes a liberation of electricity in glandular activity, due to secretory and excretory processes.

On the psychic side the author's main conclusion is that "electric and galvanic phenomena take place in the human organism exclusively as an expression of our emotions and affective states." So far as can be judged, moreover, the magnitude of the deviation is directly as the intensity of the emotion. For every emotional state there is a corresponding psycho-electric reaction, and sensorial excitations, if emotionally

neuter and weak in themselves, produce no psycho-electric reaction when by their repetition they cease to cause any shock of emotion or surprise. The author also finds that immediate and perceptive impressions more especially find expression in vaso-motor modifications causing changes in conductivity, while imaginative and associative emotions cause secretory modification translated into changes of potential at the surface of the body. Voluntary effort can only to a limited extent inhibit these reactions.

Experiments on forty-six subjects served to show that the variations in reaction are considerable, not only in different individuals, but also in the same individual from time to time. It is also noteworthy that psycho-electric reactivity is not altogether in accordance with general reactivity. Thus persons who are in general very sensitive may not show intense psycho-electric sensitiveness. This Radecki explains by supposing that in sensitive persons the multiple emotions aroused interfere with each other and diminish the final result. It is thus impossible to establish a norm of sensitiveness, though it remains of interest to compare the sensitiveness of special determined types of subject.

An interesting series of experiments was concerned with the use of the galvanometer, and especially the electrometer, in psycho-analysis on Jung's lines. A frequently repeated experiment is for the subject to select mentally a particular playing-card, and for the experimenter to determine which card has been selected by the reaction to the galvanometer as he presents the cards in turn to the subject. This experiment is nearly always successful. Incidentally, Radecki recommends the use of the galvanometer in courts of justice.

The general conclusion is that though the psycho-electric method has serious limitations, it yet has its advantages, more especially since it renders possible the objective registrations of affective processes which are so slight that all the other physiological methods—cardiographic, plethysmographic, dynamometric, etc.—fail to record them.

HAVELOCK ELLIS.

Visual Phenomena in Fever [Ueber Fieberphantasmen im Wachen].
(Zt. f. d. gesam. Neurolog. u. Psychiat., 1912, Heft 4.) Näcke, P.

The observations of alienists on themselves are always interesting. Professor Näcke here carefully records and discusses some phantasmal experiences of his own during an attack of right broncho-pneumonia with high fever last winter. His age is 61, and he appears to be very little liable to subjective visual phenomena. He mentions that he has never even been able to detect hypnagogic hallucinations. During his recent experience of such phenomena he was fully conscious, and dictated a description to his wife. On the second day of the illness, when lying on his back in a dark room in the evening with closed eyes, he became aware of a crowd of pictures passing before him to the right, at a moderate and equal rate, which was not easy to arrest, on a flat surface, apparently about half a yard from the eye—woods, canals, lakes, groups of women and children, etc.—but the details could not be clearly seen (he is very short-sighted). The visions could also be seen with open eyes, but not so distinctly as with closed eyes. There was some

colour, but for the most part the pictures were in black and white. The next day, in bright day-light, with no fever and normal pulse, similar visions, apparently at the same distance as before, were seen when the eyes were fixed on the dark carpet. They were more distinct than on the previous day, especially when the eyes were closed. It is noteworthy that they tended to disappear when attention was distracted from them. In the evening, with fever, a great variety of figures and landscapes appeared, but not so clearly as before.

In discussing this experience, Näcke supposes that there was increased sensitiveness of the retina due to fever, with hyperæmia, more rapid circulation, changed metabolism, and heightened blood-pressure. In addition to the entoptic manifestations thus caused, Näcke supposes an increased sensitiveness of the visual centres, and perhaps heightened imagination and association. The appearance of the visions on the second day of observation, in the absence of fever, Näcke puts down to commencing exhaustion and changed metabolism. The content of the visions is attributed to entoptic flecks developed, under the influence of attention and fixation, by the pressure of the eyelids. It is added that the visions could not be influenced by the will, and that they had no relation to anything recently seen or read of. The visions differed from illusions, Näcke concludes, by being based on entoptic phenomena developed by attention, and might be called pseudo-hallucinations. He finally sets forth their significance as links in a chain of phenomena, which, on the abnormal side, extend to the true delirium of fever and of insanity, and on the normal side to hypnagogic hallucinations and ordinary dreams. He might have added that the phenomena he has described are still more closely related to the visions—richer and more brilliant, however—produced by certain drugs, notably mescal.

HAVELOCK ELLIS.

2. Ætiology of Insanity.

A First Study of Inheritance of Epilepsy. (Jour. Nerv. and Ment. Dis., November, 1911.) Davenport and Weeks.

The term "epilepsy" is here used in a wide sense to cover not only convulsions but temporary loss of consciousness. This study is based on the pedigrees of inmates of the New York State Village for Epileptics, with the help of the Eugenic Record Office. The homes and the relations of patients and their physicians were visited. It is claimed that the pedigrees thus obtained are very different from the ordinary unscientific "family history." The number of separate pedigrees was 177, and they are here analysed by the Mendelian method. A great many pedigree charts are reproduced. These show the high proportion of epileptic offspring to feeble-minded parents. The authors regard ordinary epilepsy as due to the absence of a character in the germ-plasm, epilepsy rarely, if ever, arising from strains devoid of defective germ-plasm. The various forms of epilepsy act from this point of view much in the same way as a "neuropathic taint" may be regarded as an

inheritable unit. The cases studied as to heredity showed no evidence that any of them were of traumatic origin. Alcoholism was found to cause an excess (20 to 30 *per cent.* beyond expectation) of feeble-minded and epileptic offspring. But it is added that some of the alcoholics may have been actually feeble-minded, and thus have increased the proportion of defective children.

Feeble-minded and epileptic mothers were found to have an average of six children; as, however, the authors found the same rather high average among normal mothers, they conclude that the defective classes have not larger families than the normal classes. But the proportion increases by the tendency to a higher incidence of defectives in the defective families.

The authors advocate thorough segregation of epileptics during the reproductive period.

HAVELOCK ELLIS.

3. Clinical Neurology and Psychiatry.

On some Methods for the Diagnosis of Syphilis in Nervous and Mental Diseases [Su alcuni metodi per la diagnosi della sifilide nella malattia nervosa e mentale]. (Rass. di Studi Psich., vol. i, Fasc. 5.)
Bravetta, E.

The author has sought to establish the comparative value of the various modern tests for the diagnosis of syphilis. He has examined the blood-serum and the cerebro-spinal fluid of 116 patients, of whom 64 were known to be syphilitic and 52 free from luetic taint. The methods employed were those of Wassermann, Nogucci-Moore, Nonne-Apelt, and Porges. He concludes that the presence of the reaction of Wassermann in the blood-serum and cerebro-spinal fluid, the butyric reaction of Nogucci, and the globulin reaction of Nonne, and also increase of the cellular elements in the spinal fluid all testify in favour of pre-existing syphilis. In general paralysis and tabes dorsalis, these reactions are remarkably constant in their occurrence, and the absence of any of them is exceptional. In the functional psychoses, these reactions are generally absent, and the coincidence of syphilis with any of these affections may legitimately be regarded as accidental and not directly related to the mental disturbance. Of all the reactions, that of Wassermann, carried out on both blood-serum and cerebro-spinal fluid, furnishes the most reliable presumptions in favour of pre-existing syphilis. At the same time the reactions of Nogucci and of Nonne enable us to determine the presence of a syphilitic lesion of the central nervous system with a sufficient degree of accuracy, and they have the advantage of being simple and easy of application by those who cannot practise the method of Wassermann. The reaction of Porges with glycocholate of sodium not only gives a percentage inferior to that given by these other methods in cases of known syphilis, but also gives a notable percentage of positive results in normal sera. The positive results of the reactions of Wassermann, Nogucci and Nonne are generally confirmed by cyto-diagnosis.

J. H. MACDONALD.

Experimental Researches with the Method of Fractional Exhaustion of the Antibody of Anti-sera in order to show the existence of Abnormal Specific Substances in the Blood-serum of the Insane [*Ricerche sperimentali condotte col metodo dell' esaurimento frazionato del potere anticorpo degli antisieri al fine di dimostrare la esistenza di principi abnormi specifici nel siero di sangue dei malati di mente*]. [*Rass. di Studi Psich.*, vol. i, Fasc. 5.) Gardi, I., and Prigione, F.

In a case of general paralysis and another of maniacal-depressive insanity the authors' investigations led them to conclude that no abnormal specific substances existed in the blood-sera.

J. H. MACDONALD.

Experimental Researches on the Mechanism and Value of the Anti-hæmolytic Action displayed by the Blood-serum of the Insane [*Ricerche sperimentali sul meccanismo e sul valore dell' azione antiemolitica esplicita dal siero di sangue degli alienati*]. (*Rass. di Studi Psich.*, vol. i, Fasc. 5.) Gardi, I., and Prigione, F.

The authors' investigations lead them to conclude that the anti-hæmolytic action of blood-sera in the insane depends on the quantity of serum examined and also on the density of the medium in which the test is made. Every serum has its optimum degree of dilution which will prevent the anti-hæmolytic action. This anti-hæmolytic property can be corrected by hypersensitising the red blood-corpuscles or by employing a suitable multiple of the alexin unity. There would seem to exist an antagonism between the complementary function of the alexin and the anti-hæmolytic action of the serum introduced in the reaction, so that this action might be interpreted as anti-complementary. The authors are of opinion that both in the case of the sera of the insane and in inactivated normal sera the anti-complementary phenomenon is to be attributed to the "complementoid."

J. H. MACDONALD.

On the Clinical Value of Ehrlich's Diazo-Reaction in the Insane [*Sul valore clinico della diazoreazione di Ehrlich nei malati di mente*]. (*Ann. di Neurolog.*, anno xxix, Fasc. 4.) Cascella, P.

The author states that according to the most likely hypothesis the diazo-reaction is indicative of an intense breaking-down process in the organism affecting the albuminoid substances, and that in the insane it is to be regarded as an index of disturbed proteid metabolism. He is of opinion that the metabolic disturbance does not result from the anatomical lesions in the cerebrum, considered by themselves, but is the consequence of those causes, presumably toxic, which have given rise to the mental affection. In all, 485 men and 265 women, representing fifteen varieties of insanity after Kraepelin's classification, were made the subject of inquiry. The results are displayed in tabular form for each psychosis and clinical notes given of those cases in which the reaction was positive. Two categories of cases were recognised; those in whom a positive reaction seemed to be related with the mental affection itself, and those in whom the existence of an accidental bodily disease (tuberculosis, chronic bronchitis, cardiac and intestinal disease, etc.)

rendered it possible or advisable to associate the reaction with the physical disease. With regard to the second category it would appear (a) that in the insane bodily diseases give a positive reaction in a notable proportion (32.72 *per cent.*) of cases; (b) the reaction is more frequent in women (66.66 *per cent.*) than in men (20 *per cent.*); (c) the reaction is obtained in non-febrile diseases (38.88 *per cent.* of positive cases), although this is exceptional in the mentally sound; (d) the reaction is given in the insane by bodily diseases which do not produce it in the sane; (e) in the insane the reaction does not serve as a differential diagnostic criterion between enteric fever and other affections resembling it clinically; (f) the prognosis is generally unfavourable.

With regard to the relation of the reaction to the mental affections themselves the following are the conclusions arrived at. (1) The reaction is rather rare in the insane, and occurs only in certain forms of insanity, and that not constantly. It is got in senile dementia, infective toxic psychoses, epilepsy, and acute phases of dementia præcox. It may also be met with in agitated states in other affections, when the agitation is associated with severe and rapid loss of flesh, and in aged patients who are physically exhausted. (2) It is more frequent in women than in men (35.5 *per cent.* of women and 4.04 *per cent.* of men, of those cases examined of senile dementia, infective psychosis, epilepsy, and acute initial stage of dementia præcox. (3) It is a good differential diagnostic criterion between epilepsy and hysteria, as it never appears in hysteria. It is of no value in differentiating febrile and infective deliria (initial delirium of typhoid, acute delirium, etc.), from the abrupt initiation of dementia præcox, for it may be found in each case. (4) The prognosis is less unfavourable than in bodily diseases.

J. H. MACDONALD.

Pseudo-epileptic attacks in Psychopaths. [Über affektepileptische Anfälle bei Psychopathen]. (*Allgem. Zeitschr. f. Psych.*, vol. lxxvi, No. 6.) Stallmann.

This article begins with the statement that there are psychopaths who suffer from typical epileptic attacks and are not epileptics. Six cases are quoted and a full history of each is given. In every case there was a neuropathic or alcoholic heredity, and the patients were all moral defectives who, to a greater or lesser degree, had got into trouble by law-breaking. The attacks observed were in every detail like typical epileptic seizures, but the causes and effects evidently differed from those in true epilepsy. The attacks were brought on by objective stimulation, generally of a sudden nature, e.g., failure of an attempt at suicide, anger on account of the remarks of other inmates, etc., but sometimes the exciting cause was prolonged, e.g., imprisonment. When the cause was removed the attacks stopped until another irritation occurred. Several of the cases had been under observation for years, and the recurrence of attacks does not seem to have impaired the intellectual faculties, which remained *in statu quo*, but in the intervals between attacks the patients improved in mental and physical health. The incidental nature of the attacks, which occurred episodically after intervals of perhaps months, or it might be only once, differs from the typical regularity of true

epileptic seizures. The age of the patients in the cases observed was between thirty and forty. In classifying the symptoms as a distinct form of insanity, the difficulty lies in distinguishing these from the symptoms of hysteria. It is true that no definite somatic and mental symptoms can be traced, but on the other hand the author believes that he has observed in every case a more or less intense vasomotor neurasthenia.

HAMILTON MARR.

Mental Derangement in Cases of Tumours in the Frontal Region [*Die psychischen Störungen bei Stirnhirntumoren*]. (*Zeitschr. f. Psych.*, vol. lxxviii, No. 5.) Serog, Max.

Three cases of tumour in the frontal region are described in detail, and the mental symptoms are discussed in relationship to the pathological findings. Following this there is a dissertation on mental faculties associated with the frontal region. The general conclusions are that there are apparently no distinct characteristic mental symptoms in cases of injury to the frontal region. "Humorous mania" (Witzelsucht), dazed conditions and Korsakoff's symptom-complex, so often observed in cases of tumour, are to be looked upon as general symptoms caused by the pressure on the brain. As regards the mental processes of the frontal region, the idea that it is the seat of the "intelligence" should be rejected; the intellectual functions are rather to be localised in the entire cerebral cortex. At the same time the frontal region is not exempted from playing a particular rôle—possibly it has its value as the centre of co-ordination.

HAMILTON MARR.

Symptoms of Pressure on the Vascular System and their Value in Differential Diagnosis of Cases of Dementia Præcox [*Spannungserscheinungen am Gefäßsystem und ihre differential diagnostische Verwertbarkeit für die Dementia præcox*]. (*Allgem. Zeitschr. f. Psych.*, vol. lxxviii, No. 5.) Baller.

Among the physical symptoms which may be found in dementia præcox Kraepelin mentions "vaso-motor disturbances, cyanosis, circumscribed œdema, etc." Dr. Baller, on examination of a number of cases, traces these conditions to compression of the large veins by tension of the muscles in cataleptic conditions, and describes the œdema and cyanosis as symptoms following a catalepsy of the vascular muscles.

On the grounds of statistical investigations, and after a comprehensive survey of literature on the subject, the author is of opinion that the vascular disturbances are a specific symptom of dementia præcox, and may thus be readily employed in differential diagnosis.

HAMILTON MARR.

Chorea and Mental Troubles [*Choree et Troubles Mentaux*]. (*Rev. de Psychiat.*, Sept., 1911.) Marchand et Petit.

In the case of chorea, as of epilepsy, until recently two types of the disease were described—the essential and the symptomatic—the former being regarded as a neurosis. Recent researches have tended to show that "essential" chorea is symptomatic of encephalitis or meningo-encephalitis.

Numerous cases of Sydenham's chorea have been reported in which such lesions were discovered *post mortem*. Clinically the occurrence of such motor troubles as paralysis (sometimes localised) and acute ataxy indicates an underlying organic condition. So also does the presence of lymphocytosis of the cerebro-spinal fluid withdrawn by lumbar puncture. Exactly similar evidence has been determined by the authors and others that some cases of acute mental disease, especially acute confusional states, depend upon meningo-encephalitis.

These facts suggest the true explanation of the frequent association of mental symptoms and acute chorea. Both are the results of the same morbid process affecting the brain, the manifestations of which may vary according to the localisation of the lesions and their evolution. The nature of the mental changes associated with acute chorea is very variable, the most common symptoms being alterations of character and of attention and acute confusion. The authors regard the mechanism of production of the chronic choreas (*e.g.*, Huntington's) with mental symptoms as analogous. They consider these also due to inflammatory changes, the difference in the course of the disease being dependent on such factors as the extent and intensity of the lesion, the virulence of the toxic or infective agent, the age of the patient, and the existence of a psychopathic predisposition.

Two cases of mental disease associated with Sydenham's chorea are very fully reported. In one, a woman with a bad family history of neuropathic troubles, but no personal history of mental abnormality, developed acute articular rheumatism at the age of thirty-three. This was immediately followed by a confusional state, the symptoms becoming severe two months later. After a further interval of two months she developed Sydenham's chorea. Certain motor defects and the presence of lymphocytosis of the cerebro-spinal fluid suggested meningo-encephalitis as the cause. Complete mental and physical recovery followed.

In the other case two attacks of chorea occurred in a patient exhibiting mental symptoms typical of dementia præcox. The authors regard both as results of the same inflammatory process.

E. MAPOTHER.

4. Treatment of Insanity.

Hospital Treatment of Acute and Curable Cases of Insanity. (Reprint from Rev. Philanthropique, undated.) Damaye, H. Full translation by Dr. Eden Paul.

In addition to the incurable cases of insanity, the unfortunates who have to await the slow but inevitable development of a chronic disorder, we encounter a great number of insane persons whose mental troubles exhibit characters in some sort more accidental and more amenable to curative procedures. Such patients are frequently found to be suffering from some bodily affection, which is at once the originating cause and the reason for the persistence of their mental disorder. The members of this vast class of the insane need, for their restoration to health, the application of methods of treatment identical with those which are

regularly practised in the wards of our general hospitals. But such insane persons, whose requirements belong as much to the domain of general medicine as to that of psychiatry, cannot be received for treatment in the ordinary hospitals, and, in addition, their treatment needs experience of a very specialised kind. If they are neglected, their mental trouble, which is commonly acute when we first see them, is apt to become chronic; and these patients then go to swell the ranks of the incurably insane.

Certain cases of insanity can be cured in a few weeks, if only they are properly treated from the very outset, and if they are received for treatment in a suitable hospital. From these considerations we are led to see that we have new duties to fulfil in the matter of psychiatric assistance; and that if we do much, and rightly do much, to care for the chronically and incurably insane, this does not relieve us from the duty of considering those also who may be saved from chronicity, and restored intact to society.

Our existing public asylums, intended for pauper lunatics, and also, through their accommodation for paying patients, for a large proportion of the middle classes have to fulfil the double function of asylums and hospitals. They are asylums for the chronic cases; they are hospitals for the treatment of the acute and the curable cases. But this arrangement involves the inconvenience of mixing up in the same institutions the incurable and those who are possibly curable, those who are permanent inmates of the asylum, and those who are sent there for treatment in the hope that sooner or later they will be restored to the world.

At the asylum it becomes more and more apparent that the acute cases and the chronic cases constitute two distinct categories, requiring different installations, a different *régime*, and different staffs of attendants and nurses. For the acute cases we require all the advantages of a hospital: gynæcological wards, operating theatres, a ward for curable consumptives, etc. Only if these requisites are supplied can we provide proper treatment for all the patients who are received—provide something more than the mere observation of the symptoms which justify their detention.

The law proposed by M. Dubief has the advantage of recognising as a principle that mental disorder is curable "in a larger proportion of cases than is commonly believed"; and of pointing out the subordination of psychiatry to general medicine. But his proposal does not comprehend the special measures requisite for the treatment of acute mental disorders. As regards these latter, we are of opinion that the formalities preliminary to their commitment to hospital, far from being rendered more complex, ought to be simplified, if not even almost abolished! In fact, as far as curable insanity is concerned, the ideal we should endeavour to realise to the fullest possible degree is that of *free quarters*—that is, of a real hospital⁽¹⁾.

¹ Damaye and Méxie, *Echo médical du Nord*, January 3rd, 1909, "Placement nécessaire et précoce des malades atteints de troubles mentaux." Damaye, "La période de curabilité dans les affections mentales," *Progrès médical*, June 18th, 1911. (The latter paper epitomised by M. Eden Paul in *Journal of Mental Science*, January, 1911, p. 159.)

We all know how difficult it is for the members of an ordinary family to make up their minds to consent to the placing of one of their number in a lunatic asylum, whether public or private. This reluctance depends mainly upon the fear of making public the fact that a hereditary taint exists, upon the fear of an opprobrium which will attach to all the relatives of the person who is sent to the asylum. Add to this the ancient prejudices, the unwarranted fear of the asylum environment and the dislike to the legal formalities which have to be gone through, and we have a complex of opinions and motives infinitely commoner than those which might lead anyone's relatives to attempt to bring about confinement in an asylum without proper cause. Hence it happens that most families keep a mental case at home as long as possible, and this, in many instances, greatly to the detriment of the chances of cure.

It is true that more reasonable views gradually gain ground, so that we may hope that ultimately the dread of the lunatic asylum will disappear, just as, in our great towns, the former dread of the hospital has now largely disappeared. But, in my opinion, mental patients for whom there is any chance of cure ought to be admitted, just as other patients are admitted to hospital, on the simple demand of their medical adviser, leaving to a later date the legal formalities now prerequisite to a commitment to an asylum should a chronic mental disorder supervene, or should a definite demand for legal sequestration be made by the relatives of a dangerous subject. The adoption of this system would not exclude the possibility of official certification by special order of the authorities, but it would render it possible for the relatives of an acute mental case voluntarily to submit the patient to conditions proper for his treatment, just as is done now when a non-mental patient requires a surgical operation. I do not pretend that the practical application of these ideas is free from difficulty, nor do I deny that the physicians who would be responsible for the management of this new order of cases would require to act with very great circumspection. But the difficulties mentioned do not render such a system at all impossible, and I think that the experiment ought to be tried.

In any case, the separation of the services for the acute and the chronic cases respectively is eminently desirable; and in certain asylums the admission wards might advantageously take the form of a small hospital for acute mental cases. But if we carefully analyse the development of actual tendencies, we find, at any rate in the large centres, that there is a predilection in favour of the establishment of special institutions for the acute cases, and we observe a tendency to deal with some of these cases in our general hospitals. Prof. Déjerine was one of the first to do this, and he obtains excellent results with those of the insane who are not dangerous and who have no desire to run away from the asylum. At the suggestion of Dr. Le Gendre, the Société médicale des hôpitaux de Paris has asked for, and has already been granted, the establishment at Tenon and Lariboisière of wards "for delirious and excited patients," the primary object of which is to avoid the necessity for certifying some of these patients. At Bordeaux, for some years past Prof. Régis has had charge of a small ward in the

Hôpital Saint-André, solely for the reception of cases of acute mental disorder (¹). At Lille, again, thanks to the initiative of Prof. Combe-male, there is a hospital clinic for the examination of all the insane of the Department du Nord, and all the acute cases are retained in the hospital.

These examples show that there is a movement on foot in favour of the separate treatment of these two categories of the insane, and further in favour of assimilating to the hospital certain parts of the asylum. At the Congress of Alienists and Neurologists at Dijon in the year 1908, M. Bluzet, Inspecteur des Services Administratifs au Ministre de l'Intérieur, spoke encouragingly of the efforts of psychiatrists to secure for patients suffering from mental disorder the therapeutic advantages which have long been enjoyed by those suffering from other diseases.

Old-time ideas about insanity have led to the lunatic being considered as a worthless member of society, and even as a malefactor who is to be placed in safe keeping in a place remote from the human hive; and these ideas have led to the building of many of our asylums in remote country places. But to-day we are learning to recognise that there are incontestable advantages in proximity to the great centres of population, to our large towns, above all as far as those suffering from acute mental disorder are concerned. In fact, other specialists are now frequently called in consultation with the psychiatrist. In numerous cases the proper treatment for our patients can only be applied with the help of the surgeon, the gynæcologist, the oculist, the dentist, etc. For this reason, it is essential that future establishments for those suffering from mental disorder should be erected as near as possible to our great towns.

Certain writers, carrying a stage further the assimilation of mental disorders to the other affections coming within the general domain of medicine, have rightly objected to the term "lunatic" as no longer scientifically exact, and as having an evil connotation in the public mind. Thus, at Chambéry, Dr. Aubin and M. Vermale no longer speak of the *lunatic asylum*, but of the *hospital for disorders of the mind*, regarding the latter term as less humiliating for the patients and their relatives.

All these considerations, founded upon the modern tendencies of psychiatry, show very clearly the direction in which those interested in the better care of the insane may most profitably advance. What we have to do is to organise, either in the asylum itself, independent quarters for the application of special modes of treatment; or, preferably, in densely populated regions, to found special institutions, true hospitals for acute cases. The psychiatric science of to-day is adequately furnished with therapeutic methods for it to be possible for us to think of organising in a systematic and methodical fashion the treatment of the curable patients. We must place the patient with mental disorder in the conditions most favourable to the remission of that disorder, and by doing so we shall in a great many instances prevent the onset of a chronic condition, and the intellectual decay which so often ensues. Thus we shall preserve, for society, more embodiments of the life force, and for the family, a larger number of valuable members. And to the public

¹ Régis, "Les Delirants des Hôpitaux, leur Assistance," *Presse médicale*, September 12th, 1903.

at large, the alienist, we may venture to hope, will gradually come to appear no longer as a kind of gaoler, standing between unfortunate wretches and their liberty, but as the physician of one of the greatest afflictions of humanity, and a physician who is sometimes able to effect a cure.

5. Pathology of Insanity.

On the Behaviour of the Pericellular Reticulum in some Pathological Processes in the Nervous Tissue [*Sul Modo di comportarsi del reticolo pericellulare in alcuni processi patologici del tessuto nervoso*]. (*Riv. di Pat. Nerv. e Ment.*, vol. xvi, Fasc. x.) Besta, C.

As the result of his investigations Besta is strongly of opinion that the pericellular network described as a true histological element by Golgi, Held, Donaggio, Meyer, Bethe, and regarded by Cajal, Lugaro, and Marinesco as an artificial product, is a real morphological constituent of the nervous tissue. He holds it proved that the peripheral reticulum of the nerve-cell may remain intact when the cell itself is in an advanced state of destruction, and sometimes even when it has completely disappeared. In any case alterations of the reticulum, when present, are related not directly to the cell destruction but to neuroglial proliferation. The network remains intact when the terminal arborisations of the cylinder axis which reach its surface are completely destroyed.

In typical cases of intense lesion of the nerve-cells involving either the endo-cellular reticulum (fasting and cold) or the chromatic substance (experimental hyperthermia), the peripheral reticulum behaves in a distinctly independent manner, being either not at all or but slightly altered. The examination of the peripheral reticulum should acquire importance in histo-pathological processes, especially when it is desirable to determine the presence of neuronophagy. Thin pieces of tissue are fixed for forty-eight hours in a mixture composed of pure acetic aldehyde 2 parts, formalin 20 parts, distilled water 80 parts, washed in distilled water for twenty-four hours, mordanted in 4 *per cent.* molybdate of ammonia for forty-eight hours, dehydrated, and imbedded in paraffin. The sections are stained, after prolonged washing in distilled water, in thionine 1 in 5000, differentiated in creosote and mounted.

J. H. MACDONALD.

Part IV.—Notes and News.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE QUARTERLY MEETING of the Association was, by the courtesy of the Visiting Committee and at the invitation of Dr. C. Hubert Bond, held at the London County Asylum, Long-Grove, Epsom, on Thursday, February 22nd, under the Presidency of Dr. WILLIAM R. DAWSON.

There were present: The President (Dr. W. R. Dawson), Mr. A. H. Trevor, Mr. G. T. Hine, and Drs. Adair, R. R. Alexander, W. H. Bailey, P. J. Baily, G. F. Barham, Fletcher Beach, J. S. Bolton, C. Hubert Bond, D. Bower, A. N. Boycott, D. Blair, G. S. Blandy, J. F. Briscoe, P. E. Campbell, R. B. Campbell, J. Chambers, G. Clarke, R. H. Cole, M. A. Collins, L. F. Cox, H. G. Cribb, H. Cullinan, A. M. Daniel, W. I. Donaldson, R. Langdon Down, J. F. Dixon, T. Drapes, A. J. Eades, E. Gane, F. C. Gayton, J. W. Geddes, E. Goodall, S. J. Gilfillan, B. Hart, H. E. Haynes, J. W. Higginson, C. K. Hitchcock, R. D. Hotchkis, F. R. P. Hughes, P. T. Hughes, G. H. Johnston, E. M. Johnstone, John Keay, W. Brooks Keith, Lt.-Col. Kennedy, H. Kerr, N. Lavers, J. R. Lord, P. W. MacDonald, T. W. McDowall, H. J. Mackenzie, W. J. Mackeown, E. Mapother, J. E. Martin, Alfred Miller, Sir James Moody, C. S. Morrison, F. W. Mott, W. F. Nelis, A. S. Newington, H. Hayes Newington, N. Oliver, E. S. Pasmore, A. W. Paton, W. Eden Paul, G. E. Peachell, O. P. N. Pearn, E. Powell, W. Rawes, C. Rolleston, Sir George Savage, W. J. Seward, E. S. Simpson, R. Percy Smith, T. Waddelow Smith, J. G. Soutar, P. Spark, A. de Steiger, R. C. Stewart, F. R. P. Taylor, O. F. N. Treadwell, T. Seymour Tuke, H. W. White, J. C. Woods, J. C. Wootton, R. Worth.

Visitors: A. O. Goodrich, J.P. (Chairman of the London Asylums Committee), T. Hunter (Chairman of the Visiting Committee of Long-Grove Asylum), W. Haydon, W. Lloyd-Taylor, J.P. (members of the Asylums Committee), H. F. Keene (clerk of the Asylums Committee), W. Clifford Smith, M.Inst.C.E. (Asylums Engineer), Rev. E. Goodchild, Rev. T. Morrissey, Rev. J. Woodhouse (chaplains of Long-Grove), Rev. E. W. Northey, J.P., Dr. Geo. Clifton, J.P. (Chairman Leicester Borough Asylum Visiting Committee), F. Perkins Pick, F.R.I.B.A., Drs. H. M. Berncastle, F. Dillon, L. Laurie, G. Rice, and J. Williamson (M.O.H. Epsom).

Regrets at inability to be present were received from: Sir Clifford Allbutt, Sir Thomas Clouston, Sir William Collins, Sir James Crichton-Browne, Sir Bryan Donkin, Sir David Ferrier, Sir George Newman, Sir John Batty Tuke, and Drs. M. T. Archdale, A. Bowles, F. Stj. Bullen, D. G. Campbell, E. Marriott Cooke, S. Coupland, G. Dickson, C. C. Easterbrook, F. A. Elkins, C. T. Ewart, Gardiner Hill, C. H. Hopkins, Carlyle Johnstone, Robert Jones, N. Lavers, W. Bevan Lewis, T. C. Mackenzie, G. W. F. Macnaughton, H. C. Martin, J. Middlemass, R. Miller, R. H. Mumby, J. Neil, M. J. Nolan, W. A. Parker, E. C. Plummer, J. M. Redington, G. Revington, D. Rice, J. B. Ronaldson, E. H. O. Sankey, T. Claye Shaw, G. E. Shuttleworth, T. E. Knowles Stansfield, R. H. Steen, J. Stewart, W. B. Tate, D. G. Thomson, A. R. Turnbull, A. R. Urquhart, W. R. Watson, E. White, H. B. Wilkinson, H. Wolseley-Lewis, T. Outtersson Wood.

Dr. BOND, Medical Superintendent of the Asylum, and his colleagues conducted parties of members over the institution, pointing out its salient features.

Present at previous Council Meeting: Drs. T. Stewart Adair, C. Hubert Bond, David Bower, Robert B. Campbell, James Chambers, W. R. Dawson, J. Francis Dixon, T. Drapes, R. D. Hotchkis, D. Hunter, John Keay, P. W. MacDonald, Henry J. McKenzie, H. Hayes Newington, G. E. Shuttleworth, J. B. Spence, W. H. B. Stoddart, J. G. Soutar, F. R. P. Taylor.

LUNCHEON.

The inspection of the Asylum occupied the morning, and, before commencing the business of the afternoon, the members were entertained at luncheon in the Recreation Hall, during which a selection of music was rendered by the Asylum orchestra.

TOASTS.

Dr. BOND, who occupied the chair, proposed "The King" and said he felt sure that at a medical gathering the toast would have an enthusiastic reception.

Sir GEORGE SAVAGE, in proposing Dr. Bond, said that however imperfectly he might submit it to the gathering, it was one which was sure to be acceptable, namely "Health, prosperity, and every blessing to their friend, Dr. Bond." He assumed that he had been selected to propose this toast because of his long connection with their specialty, a connection which began forty-eight years ago, and had since then been uninterrupted. During that period he had seen the immense advances which had been made in the treatment of the insane, and to-day under Dr. Bond's guidance they had seen their culmination during their inspection of Long-Grove Asylum. He would not endorse the statement which an American made to him when he was in the United States, *vis.*, that he was a believer in evolution, as everyone must be, for it had culminated in the production of the American. But, without any false flattery, all would agree with him in asserting that the work which had been done in this institution was worthy of all praise. Very much of the favourable condition of things at Long-Grove Asylum was due to the efforts of Dr. Bond, and it was a great satisfaction that he had been made a Commissioner in Lunacy. In launching a ship it was usual for bottles to be cracked. They were launching that day a ship for the good of their particular branch of medicine, and he was sure it would be agreed that the launch was a great one.

The enthusiasm with which the toast was pledged culminated in three cheers.

Dr. BOND, in responding to the toast, said he felt quite unequal to doing it justice. He was quite sure the company would appreciate that his feelings at that juncture were very mixed, and his emotions were very deeply stirred by their kindness. It was a great pleasure to him to hear such words from Sir George Savage, and to see so many of his friends around him. They would understand that he had in his mind an acute sense of regret that he was so soon to leave this institution. He was conscious that this numerous gathering included those who had come very long distances, from Scotland and Ireland, as well as the remote parts of this country. He referred with much gratitude to the way in which the President and others had acquiesced in the tentative suggestion he made that the present meeting might perhaps be held at Epsom. He would like to assure the company that he did not propose to accept, *boa constrictor*-like, all the flattering things which Sir George Savage had said, with the satisfied feeling that would produce, but he did confess that he had done his best. There were many others who deserved praise. There were around him that day friends who had helped him right loyally ever since he had been at Epsom—medical staff, nurses, and all engaged in the Institution, without whom one could not get on. It was impossible to say with what unstinted help he had been backed up. There were the officers attached to the Committee, who did not reside there, but were attached to their central department in London. The Asylums Committee of the London County Council and his own Committee were always most helpful, and it was due to them that this Asylum was in its present condition. He expressed his hearty thanks to the Association for the way in which it had accepted the toast of his health.

Dr. HAYES NEWINGTON, in proposing "The Visiting Committee of Long-Grove Asylum," associated with it the name of the Chairman, Mr. Hunter. He felt certain that the toast did not need any words from him, but it would be a bad compliment if, when the company was in such a complacent mood owing to Dr. Bond's hospitality, arguments were not offered as a justification for drinking that toast. It was not necessary to go far in order to see very substantial grounds for offering congratulations to the Asylum Committee, and he must associate with that Committee of Long-Grove the great London County Council: what they had seen that day was only a sample of what went on in all the other great asylums under the charge and control of the London County Council. On their tour of inspection members had seen abundant reason to congratulate the Committee; they had seen how that Committee had carried out its primary duty of looking to the comfort, the happiness and the restoration of those placed under their care. This was accomplished not only by the expenditure of money, but by the exercise of much thought, and scientific thought, so that underlying

everything was a good scientific reason. In that connection he need only refer to the hospital system. He remembered that when the County Council first started it tackled that most serious question of how to deal with the insanity of the Metropolis from the hospital point of view, and now they could congratulate themselves that the scheme then formed was likely to see fruition and lead to excellent results, thanks to the munificence of their old friend Dr. Maudsley. He was sure it would be good news to the members of the Association to know that Dr. Maudsley had consented to join them as an honorary member. (Applause.) He felt he must also refer to the great work done at Claybury by Dr. Mott, and all the evidence of progress shown by the Committee in proposing the reception-houses and various other departures. His memory went back almost as far as Sir George Savage's, and that gentleman would confirm him when he said that thirty years ago London was not in evidence, either at the meetings or in the Journal. But that state of things was now reversed, for London was now not only taking a fair share, but was taking the lead, by its medical superintendents and by its hard-working assistant medical officers. Another word of congratulation which he thought he could add was, that all this sound work was done to the satisfaction of that irritable and rather exacting person—the ratepayer. He would remind the company that every three years there was a time of great stress and strife, when every man and every woman in London wanted "to get at" everybody who was proposed as a candidate for the London County Council; every little fault, every fraction of a penny, which could be raked up against the individual was brought up. But through all that strife and criticism no one heard a word against asylums. He thought it might be said, "Blessed is the asylum that has no history." He was bidden to associate with the toast the name of Mr. Hunter, the Chairman of the Long-Grove Asylum. He thought he, the speaker, could claim to be something of an expert as to what a chairman should be, because for at least twenty years he had had the opportunity of watching operations in a chairman from a favourable point of view, namely, from sitting beside one. Beyond the ordinary routine duties he had, very early in his career, to recognise that he had got to give most of his time and all his heart to the work set before him. A large asylum like that which they were now visiting could not go on without constant and loving care on the part of the Chairman. Another truth which had to be recognised quickly by a chairman was, that it was easier for grit to get into machinery than it was to take it out. An asylum was the most delicate machine, and it rested with the chairman to see that it went smoothly. A very important qualification was that the chairman must be paternal. He must be kind, and yet firm in seeing that the work was properly done, and at the same time he should be approachable by everybody connected with the asylum service, and especially by the medical superintendent. The latter official should be able to come to him for advice, for all medical superintendents knew that there were sometimes tight corners when such advice was most valuable. He should be eager to give that advice and should take a fair share in the responsibility of its being adopted. From all that he could hear, Mr. Hunter admirably fulfilled these requirements.

The toast was warmly pledged.

Mr. THOMAS HUNTER (Chairman Long-Grove Asylum Committee), in responding to the toast, said it was a great pleasure to meet the Association at that institution. He did not think he possessed half the qualifications required of a chairman; but one thing he did claim to possess, namely, a great love for the work of looking after the poor unfortunate people who were committed to the care of asylums. His was the honour of being the first chairman appointed for the Long-Grove Sub-Committee, and he did not think there were many men who would have taken more interest in the work than he had. He had had a splendid committee to work with, which was always a very great help. In London, too, they had had experience which those on many other committees had not, namely, of building and equipping a new asylum. In carrying out this work they had the great advantage of being advised by Dr. Stansfield and Mr. Clifford Smith. Mr. Hine was the architect. They did not confine their observations to London, but endeavoured to get the latest information possible. The result was that he believed they had now a capital asylum, and they were proud of it. They were also fortunate in having a good builder, who had put in good work. With regard to equipment, it was a great undertaking, but their very able clerk, Mr.

Keene, gave great help in the matter. The method pursued was to obtain samples of the class of furniture and other things required, and then to go direct to contractors, and avoid dealing with the middle man. There might be the best building and the very best equipment, but if there were not someone to carry out properly the administration of the asylum it was of very little use. He was a radical reformer in reference to the treatment of patients in asylums, and he was proud of his association with Dr. Bond since the opening of the present institution. He did not think there could be an asylum in which there was less trouble with the staff, and much of the credit of that was due to the Superintendent, to his being able to judge as to the character of the people who applied to him for appointments. He was not only proud of the staff, but also of the amount of scientific work which had been done. He quite agreed that there should always be a close association between the Superintendent and the Chairman. Personally he was very sorry that Dr. Bond was leaving Long Grove, and in saying that he was voicing the opinion of every member of the Asylum Committee and of the Staff. Dr. Bond was strong, he was just, and he was courteous towards everyone with whom he had to deal. In conclusion, he thanked the gathering on behalf of the Committee for the cordial manner in which they had received the toast.

Mr. A. O. GOODRICH (Chairman of the London Asylums Committee), in proposing the toast of the Association, said that on the books of the Medico-Psychological Association there were something like 700 eminent names, and many of them he knew to have done distinguished work in the English asylum service. The Association had doubtless done a great deal in raising the standard of the medical officer. And it had not confined its attention to the medical officer, but had gone to every branch throughout the asylum service—to the attendant and to the nurse. It had altered the method of treatment of the insane, and improved the path towards recovery. He was informed that some universities had arranged to grant diplomas specially for mental work. That was very acceptable news to the laymen on the London County Council. As one of those who were sent to the London County Council by their constituents, and as Chairman of the Asylums Committee of that body, he could say they wanted to make their work as successful as possible. Last Friday, when he was at the Colney Hatch Asylum, the medical officer told them that amongst the deaths he had to report that one patient, who had died in the past fortnight, had been fifty-six years in that institution. At Hanwell, through the adoption of what Dr. Conolly instituted many years ago, four patients died in that asylum who had put in over forty years' residence. Where did the poor ratepayer come in when medical men were able to do so much to prolong the lives of their patients? It seemed to him that the Medico-Psychological Association could do anything in the way of lowering the death-rate, but they did not seem to help them, as a Committee of the London County Council, in lowering the expenses. They thanked the Association, and he was sure the public did, for having done so much in abolishing all harsh treatment. He was quite aware that the specialty had produced good and clever men; but a Lord Lister was required in that department who could do outstanding work in medical science as applied to asylums. The Asylums Committee would extend a hearty welcome to such, and would not grudge the expense to be incurred in a well-considered attempt to decrease insanity. He appealed especially to the young men, who would make their mark if they did something in this way. He did not know whether brains could be operated upon with success from this point of view. He had great pleasure in submitting the toast.

The toast was heartily pledged.

The PRESIDENT (Dr. DAWSON), in reply, said it was easy to be sure he expressed the feelings of all the members of the Association when he returned thanks for the manner in which the health of their venerable Association had been drunk, and for the kind terms in which it had been proposed. Mr. Goodrich's position as Chairman of the London County Councils Asylums Committee was one which made every word that fell from him in this connection of value, and therefore the praise which he had given them for their work in the past was extremely grateful to them. With regard to the desires expressed by Mr. Goodrich as to their future work, those desires were shared by every member of the Association. And in view of recent developments he felt sure they were commencing a new

era. This year the Association reached its seventieth birthday anniversary, but it was as virile as ever, and, indeed, more so, a proof of which was that it was making a fresh departure in revising, as it was hoped to do in the next year or two, all the conditions of service of asylum medical officers in such a way as would make the medical treatment of insanity more efficient, and would lead to the acquisition of such further knowledge of the causation of insanity as would eventually conduce to its cure, as well as to the lessening of its occurrence. There was need for the Association to be strong and vigorous, because of a circumstance which was in all their thoughts, namely, the loss which they were suffering in the retirement from the secretaryship of Dr. Bond. They could therefore sympathise the better with the Committee of Long-Grove Asylum. The degree in which that loss was felt could be somewhat gauged by the fact that to-day's gathering was the largest meeting of the Association which, he believed, had ever been held. When Dr. Bond asked him to depart a little from the usual custom and sanction the February meeting being held near London instead of in the provinces, he was only too delighted to do anything he could to mark his appreciation of the work done by Dr. Bond as Secretary of the Association. Members had been rewarded for coming, not only by seeing their host and talking with him, but by all which had been learned in going the round of that excellent asylum—one which embodied so many interesting and up-to-date features in the treatment of the insane. Not only had members learned a great deal, but they had been sumptuously entertained by Dr. Bond, and he wished to express the thanks of the Association for that, and for the facilities which had been placed at their disposal by the members of his Committee for their entertainment. It was a happiness to realise that Dr. Bond would continue to be a fellow-worker, because the first object of all, members of the Association, members of asylum committees throughout the country, and Commissioners in Lunacy, was the prevention of insanity in the first place, its cure when that was possible, and in all cases the care, happiness, and well-being of the insane. Once more he thanked those who had so heartily accepted the toast. The knowledge of the existence of such kindly feeling was a great encouragement to asylum officers in carrying on their work.

Mr. A. H. TREVOR said this was the only occasion in his life when, at a large gathering of this kind, he had insisted on his voice being heard. But he was the only representative of the Commissioners there at the moment, and he desired to say on behalf of all of them that they would unanimously welcome Dr. Bond with the utmost cordiality. He was sure he would be a great accession to the strength of the Board. The meeting might be sure that they realised to the full what Dr. Bond's feelings must be on leaving an establishment of that sort, which he had brought to such a high state of perfection. He could assure them that the Commissioners would do their utmost to make his time with them as pleasant, if possible, as that which he had had in this establishment.

Dr. BOND said he felt that he must once more express his deep thanks for the extremely kind words which had been uttered in connection with his joining the Commissioners.

AFTERNOON SESSION.

The minutes of the last meeting, having already been printed and circulated in the Journal, were taken as read and were duly confirmed.

The following candidates, proposed as ordinary members, were duly elected.

Dr. Lord and Dr. Goodall acted as scrutineers.

Apthorp, Frederick William, M.R.C.S.Eng., L.R.C.P.Edin., Senior Medical Officer, St. George's Retreat, Ravensworth, Burgess Hill. (Proposed by W. H. B. Stoddart, J. G. Porter Phillips and Ralph Brown.)

Miller, Fleet-Surgeon Richard, R.N., M.B., B.Ch.Dubl., Medical Superintendent, Royal Naval Asylum, Yarmouth. (Proposed by Alfred Miller, H. Hayes Newington and C. Hubert Bond.)

Russell, John Ivison, M.B., Ch.B.Glasg., Assistant Medical Officer, West Riding Asylum, Storthes Hall, Kirkburton, Huddersfield. (Proposed by T. Stewart Adair, H. R. Cross and Richard Kelly.)

Wootton, John Charles, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical

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Officer, London County Asylum, Cane Hill, Coulsdon. (Proposed by Sir James Moody, H. G. Cribb and Norcliffe Roberts.)

Woods, James Cowan, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Assistant Medical Officer, The Priory, Roehampton. (Proposed by Sir George Savage, R. Percy Smith and James Chambers.)

CONGRATULATIONS TO SIR THOMAS S. CLOUSTON AND SIR GEORGE H. SAVAGE.

The PRESIDENT remarked that before proceeding to the regular work of the meeting, the pleasant task devolved upon him of proposing that the congratulations of the Association be tendered to the old friends of themselves and the Association, Sir Thomas Clouston and Sir George Savage, upon the recent honours which had been conferred upon them. Sir Thomas Clouston was his old chief at Morningside, and, in common with those who passed through his hands, he cherished for Sir Thomas a very sincere respect and affection. Sir George Savage was present, so that he could not say all that they thought of him, but he would ask the meeting to pass a vote of congratulation to those two eminent members of the profession, in whose elevation they felt themselves to have been honoured.

The vote was passed by acclamation.

SIR GEORGE SAVAGE expressed his hearty appreciation of the kind reference just made by the President. He had felt that the congratulations he had received were even more pleasant than the honour; they had been so manifold that they had convinced him that a considerable number of people who had suffered from mental disorder must get well, and that they could be grateful.

CLINICAL DEMONSTRATION.

A clinical demonstration was arranged by Dr. Barham and the members of the Long-Grove Medical Staff. Among the cases shown were the following:

(1) Friedreich's ataxia. (2) ? Disseminated sclerosis, with congenital nystagmus. (3) Disseminated sclerosis. (4) A case illustrating the genesis of a stereotypy. (5) Juvenile general paralysis; (6) intellectual imbecility; (7) juvenile general paralysis; (8) organic brain disease or ? juvenile general paralysis; (9) insanity from sense-deprivation; (10) insanity from sense-deprivation (cases of congenital syphilis). (11) A case showing psychoneurotic symptoms, with ultimate development of general paralysis. (12) Hysterical hemianæstheria, with talipes and torticollis; also probably of hysterical origin.

PAPERS.

"Insanity with Myxœdema" was the title of a paper read by Dr. G. F. BARHAM. It was discussed by Dr. J. R. LORD (who also read notes of a case of myxœdema under thyroid treatment twenty years ago at Banstead Asylum by Dr. T. E. K. Stansfield, who was unavoidably absent from the meeting), and EDEN PAUL (see page 226).

A paper on "Forced Feeding" was read by Dr. DAVID BLAIR (Lancaster), and was discussed by Drs. P. T. HUGHES, J. F. BRISCOE, R. PERCY SMITH, and SEYMOUR TUKE (see page 252).

A paper entitled "A Case of Double Personality" was then read by Dr. BERNARD HART (see page 236).

The PRESIDENT remarked that although the paper was one of exceptional interest, perhaps it was of such a nature that it did not readily lend itself to discussion in the very short time at their disposal.

He must, he feared, ask the meeting to take as read Dr. MAPOTHER's paper on "Aphasia in General Paralysis and the Conditions associated with it" (see page 243) so that it might be printed in the Journal.

Before adjourning he asked that Dr. Bond would convey the thanks of the Association to Dr. Barham and his colleagues for the very interesting series of clinical cases which they had prepared for inspection.

Dr. EDEN PAUL asked for an adjournment on Dr. Hart's paper to permit of discussion, as some very important questions were raised in it. He proposed formally that this be done.

Dr. HAYES NEWINGTON seconded the proposition, which was agreed to.

SCOTTISH DIVISION.

A MEETING of the Scottish Division of the Medico-Psychological Association was held in the Hall of the Royal Faculty of Physicians and Surgeons, St. Vincent Street, Glasgow, on Friday, March 15th, 1912.

Present: Drs. Bruce, Carre, Clarkson, Dawson, Gilmour, Hotchkis, Carlyle Johnstone, Keay, Marr, Marshall, Melville, Macdonald, T. C. Mackenzie, Ivy Mackenzie, McRae, Oswald, Parker, Richard, G. M. Robertson, Ross, Shaw, Watson, Yellowlees, and R. B. Campbell (Divisional Secretary).

Dr. W. R. Dawson, President of the Association, occupied the chair.

The minutes of the last Divisional meeting, and the special meeting, held on December 8th, were read and approved, and the Chairman was authorised to sign them.

Dr. YELLOWLEES referred, in appropriate terms, to the loss which the Division had sustained since last meeting through the death of Dr. J. F. Sutherland, Deputy Commissioner in Lunacy for Scotland. It was unanimously resolved that it be recorded in the minutes—"That the members of the Scottish Division of the Medico-Psychological Association desire to express their deep regret at the loss of Dr. Sutherland, who had been a member of the Association for fifteen years, and their sympathy with the members of his family in their bereavement." The Secretary was instructed to transmit an excerpt of the minutes to Mrs. Sutherland.

Apologies for absence were intimated from Sir Thomas Clouston, Drs. Urquhart, Turnbull, Reid, Easterbrook, Havelock, and Alexander.

Drs. G. M. Robertson and G. Douglas McRae were unanimously elected Representative Members of Council, and Dr. R. B. Campbell was elected Divisional Secretary.

Dr. Keay was nominated as Examiner for the Nursing Certificate, and Dr. R. B. Campbell was nominated as Examiner for the Certificate in Psychological Medicine.

The SECRETARY drew attention to the poor attendance of representatives from the Scottish Division at the meetings of the various standing committees held in London, and he suggested that the members of the Division on the Council should be nominated as members of the Parliamentary and Educational Committees. This was unanimously approved of, and the Secretary suggested that he might lay the matter before the Nominations Committee at their next meeting.

The following candidates, after ballot, were admitted to membership of the Association:

James Scott Annandale, M.B., Ch.B. Aberdeen, Second Assistant Medical Officer, Aberdeen Royal Asylum. (Proposed by Drs. Reid, Alexander, and Kellas.)

Charles Adolphus Crichlow, M.B., Ch.B. Glasgow, Assistant Medical Officer, District Asylum, Melrose. (Proposed by Drs. Carlyle Johnstone, Oswald, and R. B. Campbell.)

William Spence Melville, M.B., Ch.B. Glasgow, Assistant Medical Officer, Woodilee Mental Hospital, Lenzie. (Proposed by Drs. Carre, Chislett, and R. B. Campbell.)

The SECRETARY submitted the correspondence which he had had with the General Board of Lunacy regarding the difficulty which medical superintendents would now have in obtaining the required permission to perform *post-mortem* examinations as laid down in the opinion given by Mr. Scott Dickson, K.C. The Business Committee had previously considered the correspondence, and recommended that nothing further should be done in the matter, and that each medical superintendent should take whatever steps he considered best to obtain the necessary authority, and so guard himself against the possibility of legal actions being raised against

him. After some little discussion this was found to be the unanimous feeling of the meeting, and it was agreed that further consideration of the matter should be dropped. On the motion of Dr. McRae a unanimous vote of thanks was proposed to the Business Committee for the great trouble which they had taken in this matter.

The Secretary reported that the Sub-committee appointed by the Division to consider the terminology used in Lord Pentland's Bill had met to-day, and that they had considered the correspondence which had been received from medical superintendents and the suggested alterations which had been offered by them. The Sub-committee made the following recommendations. As many of the opinions obtained were in favour of retaining the term "asylum," it was thought advisable to retain this, but at the same time that such terms as "mental hospital," or "hospital for the insane," might be substituted if preferred. That instead of the term "lunatic," "person of unsound mind" should be substituted. That instead of the term "pauper," "public" should be substituted. That instead of the term "lunacy," "mental disorder" should be substituted. The terms suggested met with the unanimous approval of the meeting, and the Sub-committee was requested to frame a resolution incorporating these alterations, and the Secretary was asked to send a copy of the resolution to the Secretary for Scotland, the General Board of Lunacy, Scottish members of Parliament, clerks to Royal Asylum Boards, clerks to District Lunacy Boards, and the members of the Parliamentary Committee of the Medico-Psychological Association.

The Secretary stated that the Business Committee had considered the Memorandum on Lord Wolmer's Bill, and the views expressed on the Memorandum which he had obtained from the medical superintendents of Scottish asylums, and that the Committee had thought it advisable to consider at the same time "The Asylum Officers Superannuation Bill," which had been promoted by the Asylum Workers' Association, and introduced into the House of Commons by Sir Charles Nicholson, M.P.

Dr. CARLYLE JOHNSTONE briefly referred to Sir Charles Nicholson's Bill, and pointed out the more important points in which it differed from Lord Wolmer's Bill, and he proposed—"That the Division should approve of Sir Charles Nicholson's Bill generally, and support it in preference to Lord Wolmer's measure; and that the Division should in any case continue opposition to Lord Wolmer's 'Hours of Duty' Clause, and 'Dismissal of Officers' Clause. That the Division should approve of the first part of the Memorandum, with certain verbal alterations, omitting the whole of the second part referring to suggested scheme of hours, and that this should be printed and a copy sent to Scottish Members of Parliament, the General Board of Lunacy, Royal Asylum Boards, members of District Lunacy Boards, and the Parliamentary Committee of the Medico-Psychological Association."

This was seconded by Dr. CAMPBELL, and unanimously agreed to.

Dr. DONALD ROSS read a paper, contributed by Dr. R. DODS BROWN and himself, on "The Production of Leucocytosis in the Treatment of Mental Disease," which was afterwards discussed by Drs. DAWSON, BRUCE, G. M. ROBERTSON, and SHAW.

Dr. IVY MACKENZIE read a paper on "The Physical Basis of Mental Disease," which led to an interesting discussion, which was taken part in by Drs. DAWSON, OSWALD, and BROWNING.

A vote of thanks to the President for his conduct in the chair concluded the business of the meeting.

The members afterwards dined together in the Central Station Hotel.

PRESENTATION TO DR. JOHN FRASER.

Dr. JOHN FRASER, retired Commissioner in Lunacy, was presented with his portrait, painted by Fiddes Watt, A.R.S.A., by his friends on February 27th. The presentation took place in the hall of the Royal College of Physicians, Edinburgh, the Master of Polwarth presiding over a large gathering of ladies and gentlemen.

The MASTER OF POLWARTH, before calling on Sir Thomas Clouston to make the

presentation, said: Ladies and Gentlemen,—I imagine the only reason I have the honour of occupying the chair on this pleasing and interesting occasion is that it was my good fortune during the whole time I was Chairman of the General Board of Lunacy for ten or eleven years to have as my colleague Dr. Fraser, whom we are here to honour this afternoon. During the greater part of that time Dr. Fraser was Senior Medical Commissioner in Lunacy, and naturally I came very much into contact with him during that period of lunacy administration. It would be quite out of place to-day to enumerate any of the various changes which were introduced in lunacy administration during that time, but I think I may be allowed to express this opinion, that the high position which Scotland occupies in lunacy matters is very much due to the fact that our Medical Commissioners have always encouraged individual superintendents, and have always encouraged the various asylum authorities to initiate experiments, and to carry them out as they thought best, and when they found the results to be successful, they used the great influence which they possess to recommend the adoption of these methods in other places. That, I venture to think, is the secret of the progress that has been made in Scotland. We have not been bound down by any cast-iron rigid system. Now in that process our friend, Dr. Fraser, played a very important part. Quietly and unobtrusively he took note of all that was done for the benefit of the insane, and when satisfied he lost no opportunity of recommending it to others. There is one other feature I should like to mention, but I do not wish to take up time that really belongs to Sir Thomas Clouston—I would like to refer to this feature of Dr. Fraser's administration which was always brought under my notice, and that was his unfailing, his unwearied kindly disposition with all that had to do with the patients. This was extremely marked in all that Dr. Fraser did, and I am perfectly certain that his influence in this way, even without a word, must have been very great upon all concerned with the care of the insane in Scotland. His example must have borne its fruit very widely throughout our land. Well, I am not going to occupy the time of this meeting any longer, because the place of honour in presenting the portrait which we wish to present to Dr. Fraser in memory and in grateful recognition of his long services is to be taken by one who is pre-eminently qualified to take it. I refer to Sir Thomas Clouston, whose work at Morningside Asylum is so well known to every one of us. I call upon Sir Thomas Clouston.

Sir THOMAS CLOUSTON, in making the presentation, said: Master of Polwarth, Ladies and Gentlemen,—I have had the high honour done me of being asked to speak in the name of the subscribers to Dr. Fraser's portrait, and to formally present it to him. I count this as a very high privilege, and it is a duty that I agreed to do most willingly and most cheerfully. One cannot help being a little biographical on such an occasion as this. A portrait is being presented to Dr. Fraser, and some might ask, "What kind of man is Dr. Fraser?" We all know him, but at the same time one must say something formally about a man who is to receive this honour at the hands of the subscribers. Dr. Fraser was a distinguished student of Edinburgh University, and after graduating in Medicine he assumed the position of Assistant Physician at Fife District Asylum, where he subsequently succeeded Sir John Batty Tuke as Medical Superintendent, regarding whose distinction I require to say nothing. There must be something in the Fife air, stimulating not only to the minds of the inhabitants, but also to the doctors, because the Fife Asylum has produced quite a series of distinguished men. After being there for a time as Superintendent—not many years—Dr. Fraser was appointed Deputy Commissioner in Lunacy. This is a position which, in Scotland, has filled a very important part in the history of the insane. Sir Arthur Mitchell, when Deputy Commissioner in Lunacy, observed that a great number of the mentally afflicted were in such a condition that it was not requisite that they should be confined in institutions. These institutions were costly and there were other disadvantages. You may do what you like with human nature; you may put it in a palace, but if it has not an opportunity of getting liberty then it is apt to be discontented. Now there were many persons of that character throughout Scotland who were taken in hand under the Lunacy Board, but specially the whole scheme of boarding out in private dwellings was really devised in an official and administrative form by Sir Arthur Mitchell. He saw that by distributing such cases in private dwellings throughout Scotland, a means of providing for their welfare in an economical and efficient way was

assured, which at the same time added to the comfort and happiness of the patients. He wrote a book which is still an interesting one on the disposal of the insane in private dwellings, and he devised a system for their being constantly inspected from the centre in Edinburgh, which has been of extreme benefit to the country. I believe there are now between 2,500 and 3,000 patients who have been accommodated in this way, and I think that one may say, looking at the financial side, that the country is saved expensive buildings and asylum administration to the extent of £20,000 and £30,000 a year through the success of this system of boarding out. Dr. Fraser took up this system, following Sir John Sibbald, and carried it out with ability and energy, so that it became a greater success than ever. When the time came for the retiral of Sir Arthur Mitchell, Dr. Fraser was duly promoted to the position of Commissioner in Lunacy. After what the Master of Polwarth has said, I need scarcely dwell on the way in which Dr. Fraser did his work. The work of looking after the insane is one of great social and scientific interest. The study of insanity is one of profound interest, and the men at the head of affairs in Scotland who have charge of mentally afflicted people require to be men of ability, men of tact and sympathy, of great general knowledge, and especially of general social knowledge. Now I think that the successive Governments have made a most wise selection, as the Master of Polwarth has said, in those who have held these important offices. Insanity, unfortunately, is attended in the minds of the general public with a certain prejudice, and with a certain repulsion—that is a word which I have often heard used. Now it is the duty of everyone who has to do with the mentally afflicted to diminish this kind of handicap which our insane suffer from. Dr. Fraser, above all, by his personal characteristics, has helped to diminish this prejudice against insane people. I suppose few, if any, men in Scotland know Scotland better than he does. He has been thrown into contact with all sorts of people—inspectors of poor, governors of poorhouses, members of parochial boards, and county councils. It was a special characteristic of Dr. Fraser that he had a genius for friendship with all with whom he came in contact. Everybody who was brought across him came away pleased; they got information, and they felt that they had been treated in the most courteous way. Dr. Fraser, though a great Government official, did not lose his humanity; in fact he was very human, and that, I think, is a very great deal to say of any man. When Dr. Fraser retired a large number of his friends—about 200—thought that they must not allow this event to pass over without something being done, and that they ought to mark their appreciation of the great services that Dr. Fraser has performed to the State, and the great benefit he has been to the mentally afflicted, and to express the personal friendship that so many felt for him and admiration for his work. You know a thing of this kind has to be carried out and administered. It has been carried out by Dr. Campbell, who tells me that there have been subscribers from Kirkwall in the north down to Bristol in the south, from Holland, from Belgium, from New South Wales, and, in fact, the picture we are now going to present to Dr. Fraser represents friendship and comradeship in every part of the world. I trust that Dr. Fraser in future, when looking at this picture, will endeavour to look upon it not as the picture of himself, but as one of those composite pictures, and will see in it the reflection not only of himself, but of the many friends who have wished him well and have contributed to this mark of esteem. Now, Dr. Fraser, we are to present this picture to you. We think, sir, it is a worthy picture as a work of art. It is worthy of adorning your own house, and your son's house, and the houses of your successors to all generations. I am sure I express the unanimous wish of everyone present and of all the subscribers who are not able to be here, that you may live long to enjoy the sight of this picture, and the sight of the people who have had the privilege of presenting it to you. We hope you will have a long and happy life in your retirement, and that this picture will add at least one joy to those you at present possess.

Dr. FRASER, in reply, said: Master of Polwarth, Sir Thomas Clouston, Ladies and Gentlemen,—I feel myself quite unable to find words to express my feelings of pride and gratitude at the honour you have done me in presenting me with this most valuable gift. The picture is well worthy of the reputation of Mr. Fiddes Watt, the artist, and I thank him for the successful work he has expended on it. It is a high honour to me that the picture has been entrusted to an artist of such distinction. It is a gift from a host of friends, and my feeling is one of deep

gratitude for such a token of their esteem. It has come to me without, I fear, my having adequately deserved it; and the sense of that has been deepened by the remarks of the Master of Polwarth, and by the too appreciative things which Sir Thomas Clouston, in presenting the portrait, has so kindly and pleasantly said of me. This act of kindness has made me fully recognise how much I am a debtor all round—all along the road of life down to the present moment. My years, which are now many, have been filled with interesting work, which I thoroughly loved, and which I have done my utmost to perform to the best of my ability. I trust it has had some measure of success. I remember with gratitude how abundantly I have been helped by my colleagues at the General Board, by medical superintendents, and by the official staffs of asylums and other establishments for the insane, by officials of Government departments, and by inspectors of poor throughout the length and breadth of Scotland, all of whom I have looked upon as fellow-workers and personal friends. To my numerous other friends not connected with my official work I tender my sincerest thanks for their associating themselves with this presentation. During the seventeen years I was Deputy Commissioner, and the sixteen years I was Commissioner, I endeavoured to do my duty justly and kindly, and to be sympathetic and helpful to all with whom my work brought me into contact. I have been associated in my lunacy work with very distinguished colleagues; those who have passed away (Sir Arthur Mitchell, Sir John Sibbald, and Dr. Robert Lawson), and those who are still with us (Dr. John Macpherson and Mr. Spence). Their influence and example have done much to shape my life, to stimulate, and to encourage me. I congratulate all my fellow-workers on the improvement which has been effected in the way the insane are now treated, and I venture to affirm that nowhere has the improvement been more marked than in Scotland. In the way the insane are provided for Scotland stands (as she ought to stand) second to none. I have always endeavoured to be a warm and fast friend to the patients, both in and out of asylums, and there are, I think, many who have realised this. To add to their happiness and to improve their well-being has been a duty which I have always kept before me. It was with deep regret that I severed my connection with lunacy administration, and with Scottish administration generally, which I feel the more acutely that I am not, so far as I am aware, mentally or bodily disabled from continuing to carry on such work. My hearty thanks are due to the Committee, and especially to Dr. Campbell, for their efforts on my behalf. I am fully aware of the great amount of labour and trouble involved in such matters. Ladies and gentlemen, I thank you most sincerely for your presence here to-day, and for the highly artistic form in which you have enshrined your feelings of esteem. I will for ever keep green in my heart the memory of this day, and feel sure that the feelings I express are shared equally by my wife and family.

Dr. BYROM BRAMWELL, President of the College of Physicians, proposed a vote of thanks to the Master of Polwarth for presiding.

The MASTER OF POLWARTH, replying to the vote of thanks, said: It has been a great pleasure to me to take this little part in the proceedings. I feel we rather owe our thanks to Dr. Fraser for those very beautiful words he has addressed to us in acknowledging the presentation. I am sure we have listened with intense interest to those words from one whose official career has now come to an end, although we hope that his life of usefulness will be spared for many a long day. To hear those words of cheerful gratitude for the past must be an encouragement to those of us who are younger, and who may be sometimes tempted to feel the strain of our work or feel discouraged in doing it. It is good for us to hear those words from one who can look back, as Dr. Fraser can, with satisfaction upon many years of useful work in the public service, work which is not always recognised as it ought to be.

CORRESPONDENCE.

To the Editors of THE JOURNAL OF MENTAL SCIENCE.

DEAR SIRs,—In the Journal for January, 1912, in the review of the annual report of this institution for the year 1910, the suggestion is made that I should attempt to use the verandahs day and night, summer and winter. This has been done for several years. My report reads as follows:

"The verandahs have been in use throughout the whole year for cases of mental disorder requiring treatment by means of rest in bed. These structures have recently been provided with light shutters, which prevent the rain from driving in during stormy weather. It is a remarkable fact that the patients become much attached to sleeping in the verandahs, and when, owing to the severe weather at the beginning of the winter, the removal of the patients indoors was contemplated, a storm of opposition was at once met with."

Had I added that I bowed to the storm and continued to allow the patients to sleep out the meaning would have been less likely to have been misunderstood.

Believe me, yours faithfully,

R. H. STEEN,

City of London Mental Hospital,
March 15th, 1912.

Medical Superintendent.

THE LIBRARY OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Library is open daily for reading, and for the purpose of borrowing books. Books may also be borrowed by post, provided that at the time of application threepence in stamps is forwarded to defray the cost of postage. Arrangements have been made with Messrs. Lewis to enable the Association to obtain books from the lending library belonging to that firm should any desired book not be in the Association's Library.

The following book has recently been added to the Library :

James.—*Text-book of Psychology.*

Application for books should be addressed to the Resident Librarian, Medico-Psychological Association, 11, Chandos Street, Cavendish Square, W. Other communications should be addressed to the undersigned at Long-Grove Asylum, Epsom.

BERNARD HART,

Hon. Secretary, Library Committee.

OBITUARY.

GEORGE STANLEY ELLIOT, M.R.C.P. & F.R.C.S. Edin.,
Late Medical Superintendent, Metropolitan Asylum, Caterham.

After failing health for the past five years and almost continuous confinement to the house since December 12th, 1910, Dr. Elliot breathed his last at his residence, Upper Norwood, on March 2nd, to the grief of his many friends, who had done much to brighten the last fifteen months of his life by their regular visits to him. The immediate causes of death were cystitis and heart failure, supervening upon chronic rheumatic arthritis and cardiac valvular disease. The funeral was at Elmer's End Cemetery on March 6th, and was largely attended, his old friends, Drs. Seward, Ernest White, P. Campbell and Greenlees representing the specialty.

Dr. Elliot was born on April 20th, 1844, at Exeter, where his father was Physician to the Devon and Exeter Hospital. After completing his medical education at Edinburgh he held in succession the post of House-surgeon to the Salop Infirmary, Assistant Medical Officer to the Worcester County and City Asylum, Coton Hill Hospital for the Insane, Caterham and Colney Hatch Asylums, and on December 22nd, 1879, was elected Medical Superintendent of Caterham Asylum, which post he ably filled until June, 1901, when he retired upon a well-earned pension. Tall, of soldierly mien and polished manners, a thorough man of the world, a first-class administrator, imbued with the highest sense of rectitude, tactful, sincere, urbane, and sympathetic, Dr. Elliot was held in great affection by all those who knew him intimately, both in connection with his official duties and socially at his clubs and elsewhere. At the request of the Metropolitan Asylums Board he largely planned the asylum at Tooting Bec, for

which work he was voted a special honorarium, and an addition of some years was made to his service in computing his pension. He was a bachelor, and will be much missed at the Constitutional Club, where for several years on Wednesday afternoons a little coterie foregathered in the bay window of the smoking-room around the chair of their now lamented friend. ERNEST W. WHITE.

NOTICES OF MEETINGS.

Quarterly Meeting.—The next meeting will be held in London on Tuesday, May 21st, 1912.

Irish Division.—The Summer Meeting will be held on Thursday, July 4th, 1912.

NOTICES BY THE REGISTRAR.

The next examination for the Certificate in Psychological Medicine will be held early in July, 1912; also the examination for the Gaskell Prize.

Competitors for the Bronze Medal are requested to send their dissertations to the Registrar on or before June 14th, 1912.

APPOINTMENTS.

Blaxland, F. T., M.B.Syd., Junior Assistant Medical Officer, Department of Lunacy, New South Wales.

Curtis, G. S., M.B.Syd., Junior Assistant Medical Officer, Department of Lunacy, New South Wales.

Deans, R. H., M.B., Ch.B.Glas., Second Assistant Medical Officer to Govan District Asylum, Hawkhead, near Paisley.

Hughes, Percy T., M.B., D.P.H., Lecturer on Mental Diseases at the University, Birmingham.

Nowland, H., M.B.Syd., Junior Assistant Medical Officer, Department of Lunacy, New South Wales.

Ogilvy, David, B.C., M.D.Dub., Medical Superintendent of the London County Asylum, Long Grove, Epsom.

Thomson, A. M., M.B., B.Ch., R.U.I., Assistant Medical Officer to the County Asylum, Prestwich, Manchester.

THE JOURNAL OF MENTAL SCIENCE

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Part I.—Original Articles.

*The Production of Leucocytosis in the Treatment of
Mental Diseases.* ⁽¹⁾ By R. DODS BROWN, M.D.,
F.R.C.P.E., and DONALD ROSS, M.B., Ch.B., Royal
Edinburgh Asylum.

MUCH work has been done within recent years towards elucidating the causation of mental diseases, and it is now recognised by most alienists that some forms of mental disorder are due to toxins, many of which are microbic in origin. At the same time there does not seem to be any general agreement that one particular organism or group of organisms is the exciting cause in any particular disease.

If, then, this be the case, it seems justifiable, if empiric, treatment to administer to the patient a drug which we know stimulates the natural defences against toxæmia.

During the last few years many drugs have been introduced to bring this about, but their use has been largely confined to surgical cases, such as appendicitis, peritonitis, and to puerperal sepsis and specific fevers. They have also been given as a prophylactic measure previous to abdominal operations. We can find comparatively few references to their use in mental diseases.

The drugs which have been most extensively used are nucleic acid and its sodium salt, which are prepared from yeast, white of egg, thymus and thyroid gland by digestion with pepsin and

weak hydrochloric acid. Cinnamic acid and its sodium salt, hetol, coumarate of soda, levurine and tylmarin have also been employed.

The use of yeast as a remedy for boils and skin diseases has been recognised for a very long time. It was said by the late Professor Kossman, of Berlin, that Hippocrates recommended yeast for female complaints. It has been given in modern times in cases of fever, acute and chronic bronchitis, and habitual constipation.

The therapeutic action of yeast was once thought to be due to its fermentative properties, but this, as has been proved, rather interferes with the good effects it otherwise produces. In addition to a fatty material, which has a laxative action, yeast contains an organic compound of nucleic acid, known as nuclein, and which Hedrich, in 1904, suggested as the agent which brought about the good results obtained by this method of treatment.

Nucleic acid and its salts have the power of producing a leucocytosis.

Deutschmann has injected animals with yeast in increasing doses and has used their serum, which, he says, confers considerable protection against pyogenic organisms, pneumococci and their toxins.

Improvement has been brought about also by the administration of yeast by Huggard and De Backer in cases of tuberculosis and cancer.

At the present time the use of nucleic acid and its sodium salt has largely taken the place of yeast in the production of leucocytosis. These have been extensively employed in many pathological conditions, but it is unnecessary and undesirable that we should refer here to their use in conditions other than mental diseases.

Parlavecchio found that nucleic acid favoured an increase in the quantity of alexins and agglutinating substances, while Chantemesse found that the opsonic index was considerably increased twenty-four hours after injection.

General paralysis is the disease in which nucleic acid has been tried most extensively. The first publication of its use in this condition comes from Fischer, who has experimented with it for several years. He began by injecting large doses of sodium nucleinate, but later he gave 0.5 grm. in 10 *per cent.*

solution. He administered this every third or fifth day and a leucocytosis invariably followed. As a rule Fischer used as many as thirty-two injections in each patient.

His first series of cases consisted of twenty-four patients, and of these four passed into a complete remission and returned home. Two others were greatly improved, four died, and in the remaining fourteen no change occurred. In twenty-two control cases no improvement was observed and eight of them died.

In a second series of ten cases four were completely cured, one was greatly improved, and five were not improved.

While the number of Fischer's cases is small, the good effects of nucleic acid treatment can hardly be regarded as a coincidence.

Very favourable results have been reported by Donath, who is of opinion that general paralysis is largely a disease of metabolic function due to toxic products circulating in the blood. Like other observers, he was impressed by the fact that an infective or febrile process in the course of the disease very often has a beneficial effect, and he concluded that hyperleucocytosis should be aimed at in the treatment. He uses a 2 *per cent.* solution of sodium nucleinate in 2 *per cent.* sterile normal saline solution, and he injects 50 to 100 c.c. of this at intervals of five to seven days. The initial dose was 1 grm., and after it had become tolerated he increased it up to 4 grm. in 4 *per cent.* solution. The average number of injections that each patient received was eight. A leucocytosis and a rise of temperature followed in each case, and the average count of the white blood-corpuscles was 23,000 per c.mm. In one case the leucocytes rose to 61,000. This was obtained in from four to ten hours after injection. The temperature rose to between 101° and 102°, and the normal line was again reached in from three to five days.

The results which Donath obtained were most remarkable. Of twenty-one cases he had ten complete recoveries, and all of these resumed their ordinary life and occupation. Of the eleven remaining cases five were able to go home. Thus in 71 *per cent.* distinct improvement resulted. The most noteworthy features were the disappearance of the tremors and of the excitability, and the improvement in memory, arithmetical calculation and articulation.

In a second series of fifteen cases complete remissions were obtained in three and improvement in six patients, so that in 60 *per cent.* the treatment seemed to bring about a beneficial result. The very high proportion of remission and improvement would seem to us to establish the value of the nucleic acid treatment, and it is interesting to note that the patients had remained well for at least two years when Donath, in 1909, reported his results. Lépine does not confirm Donath's results. He obtained a few ameliorations in some cases of mental disease which he thinks is due to increased leucocytosis. Of seventeen cases of general paralysis only one was slightly improved, in five the symptoms were aggravated, and three died. His results were especially favourable in acute and sub-acute mania, and satisfactory on the whole in dementia præcox and "degenerative delirium."

Hüssels' results are not so good as those referred to above. He used from 1 grm. to 2.5 grm. of nucleinate of sodium in five cases of general paralysis, but four of these were already well advanced in the disease, and in only one case could any improvement really be expected. Each patient received seven injections within a period of twenty-eight days, the amount varying from 40 to 100 c.c. The temperature reached its maximum in from six to eight hours, the highest record being 104.6° and the lowest 100.4°. It generally fell within twenty-four hours, but this was usually followed by another slight rise. The hyperleucocytosis was not altogether parallel to the temperature. According to Hüssels the former took longer to attain its maximum, and it endured for a longer period. The highest blood-count was 21,400 per c.mm.

Hüssels endeavoured to obtain a leucocytosis which remained uninterrupted for four weeks, and to do so he gave his patients from 10 to 12.5 grm. of the drug. Of the five patients treated by this method one passed into a remission and one was slightly improved. In no case was there any alteration in the Wassermann reaction.

It may be of interest at this point, on account of the controversy as regards the connection of syphilis and general paralysis, to mention the results obtained by Stern in the treatment of twenty-five patients suffering from specific disease in its various forms.

0.5 grm. was given every fourth day, and later this was

increased to 1 grm. in order to maintain the reaction. There was no relative change in the differential blood-count. The result in every case was definite, being most favourable in secondary and tertiary manifestations, especially skin affections. Stern suggests that the benefit obtained by the use of atoxyl may be explained by the resulting leucocytosis.

What has been done in the production of a leucocytosis by means of turpentine is well known to the members of this Association. Bruce states that a leucocytosis culminates forty-eight hours after injection, and that in acute cases some mental improvement almost invariably occurs, but in only 10 *per cent.* of the cases treated does absolute and complete recovery result. Bruce also used cinnamate of soda, which has the effect, he says, of bringing about a lymphocytosis but not a leucocytosis.

McDowall reports two cases, one apparently acute mania or acute delirious insanity, and the other depression with motor excitement. In the first case he used ceredin, and in the second nucleic acid which was followed by ceredin. The latter substance is present in yeast to the extent of 3 *per cent.*, and consists of fatty acids. McDowall claims that this treatment brought about some improvement.

Within recent years recourse has been had to the use of tuberculin in the treatment of general paralysis. This treatment was first carried out by Jauregg and later by Pilcz. Their aim was to bring about increased temperature and oxidation. A hyperleucocytosis followed the injection of tuberculin, and they claim to have produced prolonged remissions in many of their patients, who were able to resume their ordinary occupation. Pilcz states that three out of four patients were cured, but they were in the early stages of the disease.

During the last few years much attention has been devoted to the therapeutic use of metals in colloidal solution or metal ferments as they are called because of their action on the blood. Colloidal silver was first used as an antiseptic in 1896 under the name of collargol, but this is not really a colloidal metal in the proper sense of the term. True colloidal metals are produced by passing an electric current through pure water between electrodes of the metal to be dissolved. The metal becomes volatilised in the liquid and the solution behaves like any other colloidal substance. Silver, gold and platinum are the metals most commonly employed, and the action of the fluid is due to

the physical property of the metal, which possesses vibratory motion. Their use in inflammatory conditions is followed by (a) a reduction of temperature, (b) increased excretion of urea and uric acid, and (c) hyperleucocytosis. Five to ten cubic centimetres is the usual dose, given daily or every other day. The results obtained by these metallic ferments are stated by most observers to be more efficacious than those produced by collargol or nucleic acid.

Collargol was recommended by Vergueira in doses of 5 to 10 c.c. of a 1 *per cent.* solution in the treatment of tabes, general paralysis and epilepsy.

In order to promote the natural defences of the organism against toxæmia, Damaye and Mézie prescribed collargol in two cases, one of mental confusion and the other of acute mania, both of whom were suffering from streptococcal infection of the genital canal.

Both patients made a rapid recovery under the treatment.

While the amount of work we have done on this subject is small, we think that it is of sufficient interest to record more, especially if, as it seems, the production of leucocytosis is of definite therapeutic value in insanity.

We carried out the treatment in nine patients, five of whom were suffering from acute delirious insanity, two were cases of melancholia, one of dementia præcox of the catatonic type, and one of general paralysis in an advanced stage of the disease, and who had had frequent congestive seizures.

Four of the cases were very similar in character, and exhibited acute mental excitement with confusion, disorientation and delusions. Hallucinations of one or more senses were definitely present. In eight of our cases the only preparation we used was a 5 *per cent.* solution of nucleic acid, which was diluted with normal saline immediately before use. It was injected subcutaneously every second, third or fourth day in doses increasing from 15 up to 60 minims. The shorter the interval between the injections and the larger the dose the greater was the reaction obtained.

In one of the two cases of melancholia the average leucocyte count before treatment with nucleic acid was 8,200 per c.mm., but after injection it rose to 17,400. The highest enumeration in this case was 20,800.

We were unable to find any relative change in the differential

blood-count. There was a tendency to a slight rise of temperature, but this never amounted to more than two degrees. The patient received twelve doses within thirty days, and towards the end of the course of treatment definite improvement was seen to be taking place. She became much quieter, less depressed, and talked very rationally; but in about a fortnight after the nucleic acid was stopped the symptoms became aggravated again. We were unfortunately unable to continue the treatment in this case.

In three cases of acute delirious insanity who received nucleic acid in doses of from 20 up to 60 minims there was a marked physical improvement, together with a marked decrease in the acute excitement after about three weeks of the treatment. The other mental symptoms, however, have shown no particular improvement up to the present. The average count of the white blood-corpuscles before treatment was 8,800, and after treatment it rose to 18,200 per c.mm., and in one case it attained 28,400 after a dose of 60 minims.

In the five remaining cases which received only nucleic acid, namely, one of simple melancholia, two of acute delirious insanity, one of dementia præcox, and one of advanced general paralysis, no change in the mental condition could be detected. In each of these the leucocytosis produced by the nucleic acid was not pronounced, although the drug was administered in the same doses as in the previous case. The most successful result was obtained in our second case of acute delirious insanity, in which we first of all used a metal ferment, *argentum colloidal*, and later nucleic acid. The patient received four subcutaneous injections of the former preparation in 5 or 10 c.c. doses. After the second injection the leucocytes rose from 10,800 to 23,400 per c.mm. These injections were followed by five doses of 20 minims of nucleic acid, each of which was administered every second day. The average leucocyte count then was 17,200.

He thus received nine injections within a period of three weeks. Within ten days the mental confusion and excitement passed away, and very shortly after this he was convalescent.

In each of the nine cases the temperature almost invariably showed a rise of one to one and a half degrees within twenty-four hours after injection with nucleic acid, but this alteration was not observed after the metal ferment was given. The hyperleucocytosis in some cases did not occur until more than

twenty-four hours after the drug was administered. In three of the cases there was an abundant increase of uric acid excreted.

While continental workers seem to have obtained their best results with nucleic acid in cases of general paralysis, we have as yet only treated one case. Unfortunately he was already far advanced in the disease, and had had several severe congestive seizures. After the injections of nucleic acid he seemed much less confused for a time, and had no more seizures for a long period; but the physical signs of the disease were unaffected. Eventually he had another very severe seizure and died.

It seems to us that in nucleic acid and metallic ferments we have a method of treatment which is rational in principle, in that it stimulates the natural defences of the organism against disease, and it is one whose utility has been proved, and further use of which might well be adopted.

(¹) A paper read at the Scottish Divisional Meeting held at Glasgow on March 15th, 1912.

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Table showing Comparison of Results obtained.

Name.	Drug used.	Dose (grammes).	Frequency of administration.	Duration of treatment.	Leucocytosis.	Nature of disorder.	No. of cases.	Cured.	Im- proved.	No change.	Died.
Stern .	Nucleic acid	0.5-1.0	Every 4th day	—	17-25,000	Syphilis	25	25	—	—	—
Fischer .	Sodium nucleinate	0.5 (1 per cent. solution)	3-5 days	32 doses	—	General paralysis	34	8	3	19	4
Donath .	Sodium nucleinate	1.0-4.0 (2-4 per cent. solution)	3-5 days	8 doses	Average 23,000 ; maximum 61,000	General paralysis	36	13	11	11	1
Hüssels .	Sodium nucleinate	1.0-2.5 (1-2½ per cent. solution)	4 days	4 weeks (7 doses)	21,400	General paralysis	5	1	1	3	0
M'Dowall .	Ceredin	0.5-0.75	3 times a day	—	16,000. polymorphs 91 per cent.	Mania	1	—	1	—	—
"	Nuclein, followed by ceredin	0.1-0.2	Once daily	1 month (30 doses)	16,000. polymorphs 94 per cent.	Depression with motor excitement	1	—	1	—	—
Pilcz .	Tuberculin	—	—	—	—	Early general paralysis	4	3	—	1	—
Dods Brown and Ross	Nucleic acid and argentum colloidal	15-60 minims of 5 per cent. solution 5-10 c.c.	2-4 days 2-4 days	3-5 weeks	Maximum 28,400	Delirious insanity. Melancholia Dementia precox General paralysis	5 2 1 1	1 — — —	3 1 — —	1 1 1 —	— 1 1 1

Abnormal Development of Scalp. By T. W. McDOWALL, M.D., and COLIN McDOWALL, M.D.

IN 1893 one of us published an account of an unusual condition of the scalp. He believed that the abnormality had not previously been described. In this opinion, however, he was mistaken, for as far back as 1884 Poggi had recorded a case. Since attention was first directed to the matter a few writers, English and foreign, have published cases and ventured on various but conflicting opinions in explanation of the facts observed. The last known contributor is Dr. Eugenio Bravetta, who communicated a paper to the Medico-Chirurgical Society of Pavia in 1910. It contains an account of three typical examples, and is useful in giving a list of published cases with their authors ; but it is specially valuable because it epitomises the views of the various writers. As this communication of Dr. Bravetta is in Italian, a language not read by the majority of us, we venture to give, by way of introduction, a free translation and abstract.

As already mentioned, Poggi recorded the first case in 1884, and a translation of the short paper was published in the *Journal of Mental Science*, 1893. Poggi explained the condition by stating that "with the arrest of development of the back of the head, the skin, continuing to develop normally, becomes folded on itself by not being normally stretched."

The hypothesis of Poggi (partly shared by Besta, who, in attempting to support it, asserts that the folds are sometimes of recent formation) is based on two rather doubtful facts : on the platicephalia which should be met with in every case of furrowed scalp, and on the reduction of the scalp which, after having developed normally, becomes folded on itself in consequence of the platicephalia.

To these statements Paravicini has replied, showing (1) that the platicephalia may or may not be present ; (2) that the furrows in question are found as often in the parieto-occipital region as in the fronto-parietal ; (3) failing the platicephalia Poggi's explanation fails also ; (4) that the furrows of the scalp are a continuation of the furrows which traverse the skin of the forehead, and that such furrows, being found chiefly in

degenerates, and being common to many mammals (dogs, cats, etc.), should be placed amongst ancestral characteristics.

As already mentioned, the first case of anomalous folds of the scalp is that reported by Poggi, who had noticed in a lypemaniac the presence of "numerous and deep furrows running in curved lines with the concavity superiorly, produced by large raised folds of the skin in the occipital region and arranged with a certain amount of symmetry round a straight central furrow running antero-posteriorly." Subsequently he reported other similar well-marked cases. Whereas in his first paper he maintained that the condition was due to hypertrophy of the scalp, in his second he believed that it was caused by arrested development of the posterior cranium. Amadei discussed Poggi's communication and suggested that the cases might be instances of ordinary elephantiasis.

Lombroso observed in an assassin of twenty, two abnormal furrows of such depth as to resemble incisions, parallel, oblique, in the left frontal eminence; and in a cretin thief, one furrow which cut the arch of the right eyebrow almost vertically.

A very full abstract of the case reported by one of us in 1893 is given by Dr. Bravetta, but it is not necessary to repeat this as the original paper is easily accessible, as is also the paper by Cowan, who in the same year published the particulars of two cases.

Middlemass and Ford Robertson looked for similar cases, but failed, but afterwards Robertson observed three, slightly marked, after death.

Paravicini, in 1902, described two cases, one a microcephalic idiot, the other an imbecile with numerous signs of degeneration. The latter exhibited a specially interesting condition. Vertically and along the middle line of the fronto-parietal region were four very deep fissures running from front to back. The two meso-inferior ones began a little above the root of the nose and were prolonged right up into the scalp. In the occipito-parietal region the folds were much thicker, and separated by six deep fissures arranged vertically and parallel. The skin was not thickened, and even in the deepest parts was perfectly movable on the underlying epicranium. Dr. Paravicini made a microscopic examination of the skin during life and found it histologically normal. In answer to this article Lombroso expressed the opinion that these folds might be the

continuation of those so frequently met with in the face and neck of lunatics, often congenital, due to myxœdema.

Besta observed furrows in the scalp in two microcephalic idiot brothers, and accepted Poggi's pathogenetic explanation of them.

More recently Paravicini reported four cases, and at the same time discussed and fully illustrated their pathogenesis.

Gatti has described two cases, one a sub-microcephalic idiot, the other a person suffering from manic-depressive insanity. In the former case it was noteworthy that although the scalp was not very movable on the cranium, yet during frowning the skin of the frontal and parietal regions, as far as the lambdoidal region, took part in the movement by becoming corrugated ; and the external ear was endowed with mobility in an antero-posterior direction.

Finally Bravetta has described three cases with illustrations. They present the usual characteristics, but the following special features may be noted :

His first case was a paralytic idiot, æt. 16, aphasic, helpless, degraded, with numerous marks of degeneration. The head was brachycephalic. The furrows in the occipital and parietal regions were of the usual character. The occiput was not flattened. It is stated that the furrows appeared gradually a few months after the patient had meningitis.

His second case was a man, æt. 34, of bad heredity and wicked from his youth ; had often been convicted of various offences, was drunken, syphilitic and pediastric. In the asylum he was found to be deficient intellectually and morally. The usual furrows were found in the occipital region. In making remarks about this case Bravetta says that it is evident that the furrows may be present sometimes in the occipital region, sometimes in the fronto-parietal, or in both simultaneously. Occipital platicephalia may be absent, and is so as a rule in the fronto-parietal region. Finally the structure of the skin does not differ from the normal, and the furrows are not adherent to the skull.

Paravicini, Lombroso and Gatti assert that the furrows of the scalp are of the same character as those of the forehead, of which they are merely extensions. Bravetta thinks that the case of the imbecile described by Paravicini and recorded by himself is conclusive proof of this. Besides, his researches have

enabled him to strengthen Paravicini's statement with other cases of direct continuity on the frontal furrows with those of the fronto-parietal region. Normally, as we all know, the forehead is crossed by furrows running transversely, parallel, and some subparallel, due to the contraction of the frontal muscles ; but sometimes it shows vertical furrows corresponding to the glabella, and becoming more marked during the effort of attention. The examination of many patients by Bravetta has satisfied him that in the mentally afflicted we fairly frequently find furrows less deeply marked than those described, but still evident enough. Such furrows start from the root of the nose or upper margin of the eyebrow, and always run laterally, terminating sub-parallelly to Zoia's cranial furrows. These furrows are often short and found singly to right or left ; in some cases they are long and numerous and may extend beyond the hair-line right up to the occipital region.

The third case reported by Bravetta illustrates this point—a better class patient, æt. 68, syphilitic, chronic alcoholic, now demented. Attention is at once drawn to the wrinkled appearance of the face. The cheeks present a very deep furrow like a wound, arranged as a semicircle with the concavity touching the labial angle. Various furrows arranged like a fan converge in front of the tragus. The forehead is ploughed across its whole breadth by two principal, parallel furrows, but above and below them there are others less deep and shorter, amongst which may be specially mentioned two superciliary furrows. The scalp has six long furrows, specially marked on the right side, in all respects similar to the frontal ones, running antero-posteriorly and parallel. The two external furrows begin at the top of the superciliary furrow, cutting across the frontal furrows, and proceeding as far as the occiput. The other four furrows begin each a little higher than the other, almost like steps, and also end in the upper occipital region. During frowning the furrows of the scalp became more marked.

In reviewing this case Bravetta makes some important remarks, and says that it is evident that, besides the deep furrows, we frequently find less well marked ones, which, beginning at the lower limit of the brow, invade the fronto-parietal region and end in the occipital region. This is an important fact, because the presence of the fronto-occipital furrows prove that besides the transverse frontal furrows, there

exists a system of furrows in an antero-posterior direction which in some exceptional cases seem to be continuous. These furrows correspond to those found by Paravicini in animals possessing great mobility of the external ear, although in man they no longer have any function.

Bravetta is further of opinion that the furrows described by Poggi, McDowall, Cowan, Paravicini, Besta, Gatti and himself, and found in degenerates (idiots, microcephalics, imbeciles, maniacs, criminals), are only the continuations and exaggerations of the frontal furrows ; and that they are found in some animals (dogs, cats, lions, monkeys), where they are produced by the contraction of the supra-auricular muscles, and in man constitute an indication of advanced degeneration and atavistic reversion.

We will now describe the case at present in Cheddleton Asylum. The man is a microcephalic epileptic imbecile, æt. 33, and has an insane sister in the asylum. He is in good bodily health, and able to be employed in barrow work. He is somewhat stunted in stature. He is tidy in his habits, and has enough intelligence to express his wants and wishes. The forehead is "beetle-browed," very hairy, and the ordinary transverse corrugations of the skin are well marked. The circumference of the head is only $22\frac{1}{2}$ in., the coronal arch $10\frac{1}{2}$ in., and from the glabella to the occipital protuberance $12\frac{1}{2}$ in. The arrangement of the furrows is as follows : On the left side $\frac{1}{2}$ in. to the left of the middle line there is a furrow $7\frac{1}{2}$ in. long, commencing in front at the coronal suture and extending backwards to the occiput. It is deeper in the middle, about $\frac{1}{4}$ in., than at the beginning. It can just be made out without manual pressure, but it is lost at its extremities when this is removed. Another furrow is seen, but only when slight lateral pressure is applied, $\frac{1}{2}$ in. to the left of the furrow just described. It is $3\frac{1}{2}$ in. in length, and parallel to the first. External to the above two furrows and parallel with them is a third smaller, only $2\frac{1}{2}$ in. in length and about $\frac{1}{3}$ in. in depth. It begins about $\frac{3}{4}$ in. behind the frontal suture. The formation of the skin on the right side is almost identical with that on the left, but the first long furrow is subdivided in the middle and the third furrow is not so well seen. When the head is viewed from the back an unusual feature is evident : this is a deep central spot occupying the apex of the vertex, and the two long furrows,



To illustrate Dr. T. W. McDOWALL's and Dr. COLIN McDOWALL's paper.

Ailard & Son, Impr.

right and left, finish on each side of it. To the right of this spot a short but deep furrow runs forwards. In the photograph there is a scar to the right of this furrow. It may be added that at the back of the head the furrowing is better seen than on the top. Such a detailed description is really unnecessary, as a glance at the photographs at once shows the arrangement of the lines, and at the same time demonstrates the striking similarity existing in all the published cases.

There are at present four men in Morpeth Asylum who have corrugated scalps. Three are of the usual character, in congenital idiots, but the fourth occurs in an adolescent dement, in whom the rugæ are not well marked.

In passing from this part of the subject we may mention that there is another somewhat similar case at present in Cheddleton Asylum, and it is of special interest, that it is the first case observed in a woman. So far as we know no search for the condition has ever been made in females; and the ordinary arrangement of the hair in women would completely conceal it.

Two questions are naturally suggested by the study of these cases: on what do these abnormalities depend? and what significance should be attached to them?

Before publishing the case in 1893 several distinguished men at home and abroad were consulted, but they all confessed that the condition was quite unknown to them. Professor Kaposi, of Vienna, said—"Because the contents to be surrounded remained too small, the normally larger skin was forced to arrange itself in folds over the small skull, and in parts became atypic, *i.e.*, hypertrophied during development. I fancy, too, that the folds chiefly correspond with the cleavage of the skin (Langer's lines)."

In this opinion Professor Kundrat agreed. These lines are but little known in Britain; they are not mentioned in any text-book of anatomy, and even distinguished anatomists admit that they possess but faint ideas as to what those lines of cleavage are; yet it would appear that a study of these lines furnishes the clue to the interpretation of what we are considering, and we will, therefore, give a brief epitome of Langer's observations, which appeared so long ago as 1861 in the transactions of the Kaiserlichen Akademi der Wissenschaften of Vienna.

In introducing his subject Langer remarked that Dupuytren observed that a round awl stuck into the skin did not make a

round puncture, but a linear fissure. He made this discovery on a young man, who, with suicidal intent, inflicted three stabs in the cardiac region. The doubt whether the wounds were really, as the patient maintained, made with a round awl, or with a penknife, led to some experiments being made on the dead body. Dupuytren at once found that the prick-fissures in different parts of the body differ in direction, and that they can be diminished or widened according to the direction of artificial stretching. It was therefore evident that the insertion of an awl produced only a separation of the fibres of the skin.

Malgaigne recognised the value of this observation, and investigated the subject without discovering a general law as to the direction of the fibres. Lastly he discussed the importance the knowledge of the skin-texture has in practical surgery, noticed the distortion of wounds of the skin, and convinced himself as an operator on the living of the varying amount of retraction according to the direction of the incision.

The subject appeared so important to Langer that he conducted exhaustive researches. He started with the assumption that the fissures, made as close together as possible in the various parts of the body, would have a fixed mutual relation; and that it would be possible to group the fissures in lines and areas which would be correlated in a manner similar to what was known about the hair. The lines should represent the direction of the skin-fibre, and should afford many explanations, not only of the texture, but of the development of the skin. Langer found that the very first of his experiments confirmed his assumptions.

His researches were continued on a great many bodies of different ages and conditions, but as to the details of the manipulations it is not necessary to enlarge. There are, however, one or two important sentences which must not be omitted. Bodies of fat children gave the best and simplest results, although the direction of the fissures on many parts of the body differed from that found in adults.

In order to discover the relation of the fissures to the arrangement of the web, Langer examined many pieces of human skin under the microscope, these having previously been abundantly pricked through on the body. A section from the upper and anterior part of the thigh showed the fibres under the papillæ

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To illustrate Dr. T. W. McDowall's and Dr. Colin McDowall's paper.

Adapted for skin, temp.

in the form of a trellis work, arranged in very elongated rhomboidal meshes. The fibres were very close together and interlaced. The longitudinal diameters of the meshes were all in the direction of the prick-fissures. Similar sections from the front of the scalp, where the prick-fissures are well defined and directed towards the vertex, showed the same arrangement of the corium fibres.

The microscopic examination clearly showed that the direction of the cleavage of the corium depends on the direction of the fibres; and that the prick-fissures are nothing else than the widening of the meshes of the corium.

The fibres are not always arranged parallel on all parts of the body, for one occasionally finds fissure rows which are crossed more at right angles, so that the regular and uniform fissuring is lost.

Whilst Langer constantly observed on certain parts of the body the same arrangement of fissures, *e.g.*, on the joints, face, back, etc., other areas showed many variations.

Great importance seems to be attached to the variations found in embryos. The direction of the fissures differs in many places so essentially and constantly from that observed in adults that they must be regarded as the form of development and growth.

In giving a few of the details of some of the groups of fibres it is necessary to refer to the drawings made by Langer, and of these two photographic reproductions are shown—one of an adult, the other of a child. It was found that the bodies of infants were most suitable as standards because they gave more regular fissures, and the soft underlying bones presented no obstacle in making the punctures perpendicularly.

In the skin of the head and face the following groups of fissure-rows appear. The obliquely descending fissure-rows of the nape of the neck maintain the same direction at the back of the head above the *linea nuchæ superior*, and, as is clearly seen in the figure of the child, proceed to the pinna of the ear, and split into two directions at the mastoid process; one goes under the pinna to the upper region of the hyoid, the other above the ear to the temple.

The lines of cleavage round the eye correspond in direction to the fibres of the orbicularis muscle; in the middle of the eyebrow the lines rise towards the forehead.

The vertex is the centre towards which all the lines of cleavage run ; the longest are those which come from the forehead ; the shortest and most variable are those from the back of the head. At the base of the occiput these radiating lines are intersected by a circular band which passes from the back of the head across the temple to the forehead.

In the individual regions the following arrangements occur. On the vault of the skull the glabella shows a fan at the root of the nose, of which the base lies between the eyebrows ; on the forehead, on the frontal eminence, there is a broad band of cross fissures, which are frequently intersected by the rows ascending from the glabella. The cleavability in the adult is very uncertain ; the fissures sometimes run transversely, sometimes upwards, and are frequently quite irregular.

On the front part of the scalp the fissures of the forehead run closer together, converging rather towards the middle, but further out run almost parallel to the middle line, and at the temples obliquely upwards to the vertex.

On the upper corner of the occiput the fissures run in the direction of the vertex ; lower down they are more irregular.

To enter into more minute anatomical detail would prove wearisome, and probably obscure the main point which we desire to make clear, *viz.*, that it is by a study of Langer's lines that we will in the end succeed in understanding the curious abnormality that we are considering. For fuller and sometimes most perplexing details I refer to Langer's original paper—a record of most patient and persevering work conveyed in unusually involved German. Enough has been given to show that all the unusual furrows of the scalp, so elaborately described by English and foreign writers, are represented in the arrangements of the corium at some period of development.

All writers on these furrows have evidently believed that they are of extremely rare occurrence. That is true in a sense but is fundamentally incorrect, for if we examine carefully the scalps and foreheads of ordinary people we can demonstrate all the furrows in an elementary condition. Some of the lines described by Lombroso and others as cutting across the forehead vertically are visible on close inspection, and can be at once demonstrated by slight pressure at the temples towards the middle line. The same can be done in the fronto-parietal region, and even in the occipital region, though, as a rule, with

more difficulty. The breadth of the furrows so demonstrated appears to depend on the thickness of the skin—the thicker the skin the broader the furrows. Another factor which has some influence in the artificial production of these furrows is the amount of movement possible between the scalp and the subjacent structures. This varies to a degree probably not known by most of us.

If we are to judge from the cases hitherto recorded it seems evident that in the majority the skull was abnormally small; and the scalp appeared to be too voluminous for what it had to enclose. Therefore we feel inclined to agree with the opinion of Professors Kundrat and Kaposi that “the brain had not advanced in growth, but the skin was sufficient for a normal skull, and had developed independently in accordance with its own capacity for growth. But because the contents to be surrounded remained too small, the normally large skin was forced to arrange itself in folds over the small skull, and in parts became atypical, *i.e.*, hypertrophied during development.” It cannot be denied that in some cases the skull is of normal dimensions and yet the scalp presents well-marked furrows. In such cases we can believe that a genuine hypertrophy of the skin alone occurred. The last word has not been said about this matter, and we confess to feeling dismayed at the fields of knowledge which must be explored before the subject can be thoroughly understood.

Some Dreams and their Significance.⁽¹⁾ By Sir GEORGE H. SAVAGE, M.D.

GENTLEMEN, According to promise, I shall give you a short paper on a subject which at first sight may not seem to have a very practical value, but I hope to be able to show you that the land of dreams may provide something both of interest to the physician and to the philosopher.

I have chosen the title of “Some Dreams and their Significance.” Some of you may know already that I have always been a dreamer myself and that I no sooner close my eyes than I pass into dreamland. This has directed my interest to conditions of dreams in the healthy and in the disordered.

I begin by giving Horace Hutchinson's definition of a dream, which is—"mental activities which, occurring during sleep, are more or less recalled on waking." This excludes many mental activities which take place during sleep. The dog by the fire-side moves his paws and may even bark when asleep, but we cannot tell whether he has any subsequent recollection of what had been passing in his mind, and I have not yet found anyone who has seen a dog awake suddenly and at once appear to follow some idea which was already in his mind.

Mental action of some kind is as constant as the circulation through the brain, but only a certain amount rises into the sub-conscious layer which may again pass into consciousness. I have not time now and here to go into all the questions of normal sleep and dreams, but must get on with my special subject.

First, then, dreams may assist in diagnosis.

I have met with several cases of what might be called masked epilepsy, were this term not reserved for another form of the disorder. In these cases the patient complains of the recurrence of some distressful dream, always of the same kind.

Such cases may really be chronic epileptics who live and sleep alone, and whose fits, being nocturnal, have escaped observation, or they may be cases of epilepsy in an early stage. They may, again, be cases in which the dreams replace the "*petit mal*" and have little influence on the mental health of the patient. Watson has given the classical case of epilepsy in which the dream aura was always an old woman with a red cloak who knocked the patient down. I remember well a very busy lawyer who could not understand how it was that when he was working under special pressure he had a dream that while cleaning his teeth the tooth-brush slipped down his throat and nearly choked him. That was a case of epilepsy. In another instance the dream always occurred when there had been great physical or mental anxiety, and it took the form of alarm that the roof was falling in and crushing the family of the dreamer.

I have met, too, with persons who passed into an automatic state. Thus a gentleman consulted me about the inconvenience caused by his occasional disappearances and his inability to give any account of what he had been doing. In some of these automatic states there seems to have been a dream aura which has started the patient to perform certain acts. These acts are

perfectly performed yet with total oblivion, and thus I am brought to a difficult position as to my definition of a dream, for though the acts are perfectly performed and may depend on the dream, yet the epilepsy prevents the recollection on waking.

These automatic acts, instigated as I say by some dream, may lead to repetition of similar acts, and they may be associated with brutal or homicidal deeds. I once watched a friend who was subject to fits of this kind, and while walking with him he stopped suddenly, and with his stick began to belabour the hedge in a destructive and dangerous way. If a human being or animal of any kind had attracted his hostility, the same violence might have been directed towards it.

This passage from an epileptic dream state into an active automatic one may be compared with some of the hypnogogic conditions.

It is common even in health for persons on waking to be for a time in doubt as to their surroundings. They often see figures or hear sounds which prove to be hallucinations. These may be but the active after-glow of the dream. I know from personal experience that a dream may continue itself for a moment beyond waking, and I recognise that in some unhealthy conditions this dream-started image may persist. This mental confusion is well represented, too, in delirium. One friend of mine was interested in noticing that on recovery from a very serious illness in which delirium existed he had a kind of double memory—one of things which actually occurred, and the other of things which he had dreamed, both being equally real to him. In insane conditions I have met with perfectly parallel states, in which maniacal patients recalled at one time words which had actually been said, but at other times talked of things which they thought had happened, but which were delusions. It has been thus that I have been able to interpret certain false charges made by patients against attendants.

This not unnaturally leads me to refer to the dreams which are associated with strong sexual feelings. In some cases I am confident that accusations have been made against innocent persons as the result of erotic dreams. There have been a good many cases in which perfectly pure-minded women having had erotic dreams have given altogether false or unnatural interpretations to these dreams. Some have felt so disgusted with themselves that they have shunned neigh-

bours or relations and have gradually developed melancholia with ideas of unworthiness. Doubtless such persons were neurotic to begin with, but the thing which caused the true delusion to appear was the dream. I have met with a good many cases in which such dreams have been associated with the delusion that the patient was pregnant, and in one case nothing, even careful vaginal examination by a gynæcologist, could get rid of the dread. In a lady past the menopause who was living apart from her husband such a dream led her to believe that she had been ravished by the Devil, and was pregnant with a little devil. She was a neurotic, religious-minded woman.

Dreams, then may colour the mental disorder or give rise to delusions. With advanced years and with arterial degeneration I have met men who were troubled by their dreams, and still more by the after-images occurring in hypnogogic hallucinations.

I recall very clearly an old lawyer, who was in good general health, but gouty, and with degenerating vessels. He slept fairly, but always on waking saw people in his room. If he slept after dinner he would wake in a rage because he saw certain gipsies pulling up his favourite shrubs. He recognised the falsity of the whole thing, but he could not restrain himself when he awoke from acting on his dream.

Now I will refer to dreams which were the first symptoms of mental disorder. You will remember the cases in which the epileptic aura was a dream ; in the cases I am now speaking of similar dreams preceded similar attacks of insanity.

A lady who after the birth of a child was ill and generally run down, had a nightmare in which she saw her brother with his throat cut and the blood pouring over him.

Though told that the brother was well the idea had become fixed and no reason could move it. She felt that she was a disgrace to her family and the cause of the suicide of her brother (there had been no suicide). She slowly recovered, and for some time kept well, but the illness of her children, which occasioned a great deal of night-nursing, again brought her into the danger-zone. She had a similar dream about her brother and again became melancholic, again to recover. With the sudden apoplexy of her husband again strain was thrown on her which she could not bear ; another dream occurred, but

this time steps were immediately taken to give her rest and she passed through a milder attack of depression. I saw her the other day after over twenty years. She was well, and there had been no further breakdown.

I have met with some few cases in which a dream—generally one of horror—has preceded an outbreak of mania, the excitement and boisterousness having no relationship to the dread or terror of the dream.

Next, as to the dreams of those who are already insane.

The maniacal patient is very difficult to examine, and his accounts are not trustworthy. The melancholic generally has miserable dreams, but there is a most important exception. When a patient with mental depression begins to improve he dreams of home and happiness. I have often heard such a patient say—"I wish I did not wake at all: I was happy when asleep." Such dreams, as I say, almost certainly connote improvement and point to recovery. I would not give up hope of even a case of chronic melancholia if there were occasionally happy dreams.

Dreams do not represent one natural temperament. Hutchinson suggested that there might be reversions to ancestral habits in dreams, and that our floating dreams might really be memories of an arboreal existence of simian ancestors.

Dr. Hughlings Jackson has said: "Find out all about dreams and you will then understand insanity." Someone, I do not remember who, said that insanity was waking dreams and dreams were sleeping insanity. But enough of this; I have merely laid before you something to think about.

(¹) A paper read at the South-Western Divisional Meeting held at Brislington House on April 18th, 1912.

The Varieties of Dementia, and the Question of Dementia in Relation to Responsibility. By ROBERT JONES, M.D., F.R.C.P.Lond.

THE questions I particularly desire to raise in order to ascertain the opinion of my fellow-members are three: (1) the actual meaning of the technical term "dementia" and the variety or varieties seen or met with as primary conditions; (2) the amount of "mental weakness" which this term connotes, *i.e.*,

that exists compatible with responsibility or liability to punishment ; and (3) the question whether there can exist such a condition as partial against complete insanity, and, therefore, also partial as contrasted with complete responsibility.

It is accepted both by the Statute Law and the Common Law that mental weakness may be such as to render a person not responsible for his actions, and in regard to responsibility there are three Acts which guide medical men and lawyers as to this condition. There is (1) the Act of 1800, Geo. III, 39 and 40, c. 94, which puts the question, "Was the person insane at the time the deed was committed?" and there is (2) the subsequent enactment, the "Trial of Lunatics Act," 1883, 46 and 47 Vict., which asks two questions and places two issues to the judge or the jury for consideration, *viz.*: (a) Did the person commit the deed or act? (b) Was he sane or not? It was pointed out to Lord Selborne, the eminent legal authority and the then Lord Chancellor, who introduced the Bill, that under this Act the accused may be both guilty and insane, *i.e.*, a person may be a criminal and liable to punishment and at the same time a lunatic and be irresponsible. Such a dilemma is said to have been foreseen and, quite intentional, with the definite object and purpose of appending some "condition" if a dangerous lunatic were acquitted on the plea of irresponsibility and then discharged. It purported the continued detention under supervision as a criminal lunatic of such a person. It is possible that a rich or a distinguished man, with some mental trouble, or what would be interpreted to be "mental weakness," might commit a capital crime and be acquitted on the plea of insanity and so be free. The friends might desire to have the care of him, and might refuse to have him placed under detention, so that it might be possible for the same or a similar crime to be repeated. This could scarcely happen in the case of a pauper or rate-aided person, as he would probably be certified and so legally detained. In order to defeat such a possibility the person acquitted, whoever he may be, could, under this Act, have conditions made in regard to his discharge or acquittal, and such conditions are not infrequently imposed by the Home Office under (3) The Criminal Lunatics Act, 1884, which defines a criminal lunatic to be any person who by order of the Secretary of State, or the Admiralty, is sent to an asylum for the insane. The rules

for conducting cases of criminal lunacy were laid down by the House of Lords in 1843, in the celebrated McNaghten case, and in this case the question of irresponsibility on account of partial insanity was raised, and upon this plea the defendant was acquitted. Before 1843, Sir Edward Coke, Lord Chief Justice of England, one of the most eminent lawyers this country has ever produced, and at one time Speaker of the House of Commons, wrote, in 1625, *The Institutes of the Law of England*, in four parts, and in one of these he essays to divide insanity into four classes or kinds: (a) the idiot or *dementia a nativitate*; (b) mental weakness brought on by disease, thus anticipating our Lunacy Act, 1890, sec. 116 [c]; (c) forms associated with a lucid interval; and (d) those brought about by the person's own act, e.g., drunkenness, *voluntarius demon*. Coke added: "When a madman is executed it is a miserable spectacle, against the law, as well as extreme cruelty and inhumanity, and can be no example to others." Sir Matthew Hale, fifty years later, in 1675, brought in the question of partial insanity. He divided the insane into two kinds: (a) *dementia naturalis* or *a nativitate*; and (b) *dementia accidentalis* or *adventitia*; the latter he again described as partial or total, and stated that an insane person may then be partially or only intermittingly insane, and Hale's "best measure" of distinction, or the criterion between partial and complete or total insanity, was the amount of intellect which would be possessed by a child of fourteen years—a method of comparison which Sir James Stephen later characterised as contrasting healthy immaturity with diseased maturity, and therefore obviously illogical and unsound.

The question I am bringing forward for your opinion is how we are to class certain senile cases of physiological decay, those who appear able to manage their property, to dispose of it, who have no delusions or hallucinations, who can name their beneficiaries, and who realise the amount and extent of their property, yet whose moral conduct leads them into social, domestic, and sometimes into criminal trouble. They become indecent and expose themselves, make improper overtures to young people, neglect their person and become deficient in self-control, so that their present conduct may become totally different from their former behaviour; where in such cases does irresponsibility begin and responsibility end? Let me quote some cases. I had a patient who for nearly twenty years

worked in a Government office, but who had suffered from painful aural hallucinations, so that his friends had to place him under my care. By demonstrating the falsity of his belief and reasoning with him, and so gaining his confidence, he was able by degrees to realise that these voices were imaginary, and he was sent back (still suffering from the voices) to complete his time for a pension, which he did. A lady was brought to me (about the period of her climacteric) suffering from the mistaken idea that she was constantly being advertised for in the agony columns of the daily papers, which she repeatedly answered, and she became a source of great anxiety to her friends. In all other respects she was well, and could often see the falsity of her wandering and amorous thoughts. A man discharged from Claybury Asylum "with voices," apparently very sensible, went to Glasgow, where he succeeded in getting an appointment in an Insurance Office, but frequently wrote uneasy, not to say threatening, letters about the "influences" and "voices," yet was able to pursue his avocations satisfactorily. Numerous cases of obsessions, beliefs, "influences" and irresistible impulses, mental "tics," occur to all of us, as well as cases of commencing mental weakness, cases which cannot be described as actually demented or really insane, yet which are partially right and partially wrong. I should like to know the views of my fellow-members about this class, for I am often exercised about them, especially in the state of commencing, or the early stage of dementia.

The second point is as to the line of demarcation between responsibility and irresponsibility. This is often most difficult to delimit, and one naturally has to ask oneself, "Can a person be deprived of self-control while the other faculties are sound?" We know the mind is stated to act as a whole; the whole mind thinks, the whole mind feels, and the whole mind wills; yet we know the mind may be analysed into component parts or elements, such as cognition, or ideation, imagination and perception; feeling, or the emotional tone; and the will, or the conative faculties; and it is possible, I believe, for one of these elements of mind to be affected while the others remain normal or nearly so, so we may have a partial delusion, suicidal insanity, or a monomania, and thus a partial as against complete insanity. We know there are many patients who can speak "rationally enough" about subjects other than those

connected with their delusions. It is well known that "partial" insanity does not relieve the offender or the criminal from punishment, but it should be used to mitigate the penalty, and I believe this is not infrequently the case. I am aware the argument is now used, and was put forward by Lord Cottenham many years ago, that there is no partial insanity, that no one labouring under a delusion could be aware that it was a delusion, for if aware of it there could no longer be a delusion, but we meet with cases in which cognition is perfect and feeling-tone is normal, but there is deficient conation or will-power. The history of this controversy, as pointed out by Dr. Dupré in a recent paper, dates back to the days of Pinel, who in 1809 described the form *manie sans delire* as a partial insanity implying a perversion of the instincts, whilst the reasoning faculties and feeling or the senses were unaffected. He referred to the affection, amounting to alienation, of some of the individual mental faculties. Benjamin Rush, in 1812, described a partial insanity under the title of "derangement of the moral faculty" and associated this with a defective organisation of some part of the brain occupied by the moral faculties. Pritchard, in 1835, sought to describe a partial form in his *Moral Insanity*, the moral dispositions, for example, and the inclinations of temperament being abnormal, whilst there was no impairment of the faculty of perception or of the reasoning. Esquirol, in 1838, also supported this view. Morel, in 1860, described an instinctive insanity of this type—a delirium or wandering of the emotions or the will whilst there was an apparent preservation of the intellectual faculties. Falret, in 1866, after proclaiming the unity of all forms of psychical activity, yet acknowledged the existence of a partial affection of some of the faculties of mind: acts, for instance, might be unnatural, perverted or wrong, whilst there is full intellectual appreciation of their wrongness—they were the acts of "reasonable lunatics." Maudsley has also contributed authoritative comments upon this question of partial insanity and consequently of partial responsibility.

The term "dementia" is popularly and legally used as synonymous with insanity, but technically this is not correct. Dementia connotes those states of mental weakness which occur in persons who have previously been in full and complete possession of their normal, or of the average, intellectual faculties. The term thus excludes cases of idiocy, imbecility

and feeble-mindedness. These commence at birth or from an early age, and are described usually as cases of amentia, *i.e.*, high or low grade according to the amount of mental defect present. The term "moria" is often used, especially in American medical literature, to describe the slighter forms of congenital weakmindedness, which do not amount to imbecility or idiocy. There may be no difference between amentia and certain stages of dementia, either in quality or the quantity of mental reduction, but amentia applies exclusively to congenital cases, whilst dementia applies to those cases whose mental weakness is acquired later in life. It is the difference between the bankrupt and the very poor or indigent; both "have not," but one "has had." A further difficulty—and this is a point I particularly desire to emphasise—is to fix the line of demarcation in dementia between the amount of mental weakness consistent with responsibility and that which may be technically the dementia of insanity; the difficulty there is, for example, in distinguishing between the mental weakness of old age, which is physiological dotage, and that amount of dementia which is pathological and which is compatible with irresponsibility for criminal acts, or that form of dementia, also pathological, which is seen to follow repeated attacks of mania, melancholia, or diseases known as gross brain or arterial lesions. The actual commencement of dementia is to me always difficult to determine. I may see a patient one day and describe the case as chronic mania or melancholia, and my colleague may see the same case later in the day and describe the case as dementia. From the above remarks it will be seen that the actual delimitation of physiological and pathological dementia is of great importance from the medico-legal standpoint. As to the forms of this variety of insanity, we know dementia to follow or be associated with severe arteritis, which is the most frequent pathological condition connected with senile decay. It is also the termination of mania and melancholia, but not to any great extent of alternating insanity, or of monomania, often called paranoia, although it would generally be true to state that dementia is the natural termination of all varieties of insanity. It is especially the sequel of long-continued epilepsy, whether of the *petit mal* or the *grand mal* variety, for it is a question of repetition of the fits rather than of their severity. Dementia is the invariable

accompaniment of general paralysis, some forms of tabes and of chorea, especially the senile form, Huntington's chorea, and it may be the direct result of certain toxins—often described as racial toxins, *viz.*, alcohol, lead, and syphilis. It occurs as the consequence of the organic destruction of the brain by cysts, hydatids, pachymeningitis, or tumours when there is frequently dulness, stupidity, and hebetude. It is also known to follow injuries to the head, and it may result from hæmorrhage, embolism, or thrombosis with cerebral softening, but as a primary condition I am of opinion that there is only one form, which is characterised by heedlessness of person or of surroundings, in which the sense of personal vanity and of ambition dies, “unemotionalism” rules, and there is a shedding of mental acquisition and intellectual power in the reverse order of their acquirement; the gregarious feeling dependent upon instincts of association and social feeling disappears, and those who suffer from this form of mental weakness may well be described as mental cripples. They certainly need the “minds” of others to buttress them or to prop them up, and their mental impairment varies from a slight loss to gross degeneration, *i.e.*, from slight heedlessness or indifference to complete mental apathy. I need not recapitulate the symptoms nor their mode of onset before such a society as this, but the ways of these persons eventually become so strange and their conduct so odd and different from that of their past, that their friends and relatives consider them to be unendurable, and it becomes obligatory to care for them elsewhere than in the domestic circle. Some of them tend to wander aimlessly, and thus may come under the cognisance of the police. Others in their impulses, owing to loss of higher control and the prominence of lower or animal characteristics, may commit dangerous acts by their selfishness. When they demand the best and fail to get it they may, and do, show violence, and sometimes they appear in the criminal courts in consequence. How far is one justified in considering such cases when in the early stage of their disease, to be irresponsible, and is it possible by any combination of symptoms to state: “Here ends responsibility and here begins conduct which is irresponsible, and therefore not punishable”? Can the “partial” condition of such dementia be brought forward as a mitigation, if not an exculpatory plea, as regards punishment?

I invite the views of my fellow-members on these points, which must be of supreme interest to society as well as to forensic medicine.

DISCUSSION,

At the Quarterly Meeting held in London on May 21st, 1912.

Communications by Sir THOMAS CLOUSTON and Dr. MERCIER were read by the Honorary Secretary.

Sir THOMAS CLOUSTON: The term "dementia" should only be used to indicate incurable non-congenital conditions of enfeeblement of mind. Any other use of it leads to confusion and misunderstanding, and is also practically very inconvenient. To the student beginning the study of psychiatry such misuse is especially misleading; new names should be devised and used for "acute dementia" and "dementia præcox." *Classification.*—The great and dominating kind of dementia is the secondary or "sequential" form of the disease. That form covers five-sixths of the incurable insane. It is the most terrible and frequent sequel of Kraepelin's dementia præcox and my adolescent insanity. It is the type of all the hereditary forms of mental disease; it is an altogether unique brain condition; it is the great reversionary condition into which the brain cortex devoted to mind is liable to fall. I am now convinced that all the preliminary symptoms in adolescent insanity and dementia præcox are mere preludes and parts of secondary dementia. It affects all the higher mental faculties, though more in one case, less in another, no doubt. I cannot conceive any classification of mental diseases in which it does not form an essential part, and cannot imagine any other term to take its place. The other forms of dementia are the toxic, the senile, the paralytic, and the general paralytic, but being one phase of the progressive cortical destruction in general paralysis I should like to see its use discontinued in connection with that disease.

Dr. MERCIER: I have always understood dementia to mean any degree of deterioration of mind, whether temporary or permanent, and whether associated or not with active manifestations, such as delusions or disorderly conduct. In short, I have considered it to mean literally that the demented person is unminded, or deprived of some portion, or in some degree, of his mind, especially of his judgment and intelligence. I think there are great advantages in thus understanding the term, but I recognise, as I did not always recognise when I used it in this sense, that the meaning attached to it by other people is so widely different that when I use it in this sense I seem to them to be talking nonsense. The Scottish members of this Association mean by dementia a state of things in which a large portion or degree of mind is irrecoverably lost. They strike out from my concept of dementia all those in whom the defect of mind is slight, all those in whom it is accompanied by active manifestations, and all those who do or may recover. To them dementia means deep, irrecoverable and passive dementia, and any weakening of mind which is slight, is temporary or is accompanied, and especially if it is observed by active symptoms, is outside of their concept of dementia. By "dementia" they mean, in short, if I understand them aright, the condition of the "chronic dement" of asylums. Others, again, still clinging to the "chronic dement" as the type of dementia, and recognising that the chronic dement is liable to occasional outbreaks of violence, would admit occasional active manifestations into their concept of dementia, but would exclude and call "mania" those cases in which misdirected activity in conduct forms a preponderating or a large element in the symptoms. They would also exclude those in whom there is an element of positive mental symptoms, such as delusion, and neglecting, or perhaps overlooking, the negative element of weakness of mind, or defect of judgment, or lack of intelligence, whichever we please to call it, would call such cases chronic delusional insanity. The prevalent use of the term "dementia præcox" to characterise cases, many of which entertain delusions, some of which recover, and most of which present disorderly conduct at some time in their progress, tends to confuse and break down these restrictions, and to extend the term "dementia" so as to include any and

every case of insanity. In thus extending the scope and ambit of the term, I think the users of it are clinically wrong, but abstractedly right, that is to say, while denying that there is any natural clinical group of cases that can properly be brought together under the title of "dementia præcox," I hold very strongly that in every case of insanity there is some loss of judgment, of intelligence, or of moral rectitude which justifies the title of "dementia" in the sense of weakening or defect of mind. The use of the term "precocious dementia" implies necessarily that in advanced life dementia is the rule, and that in cases denominated precocious this invariable decay has set in earlier than usual. Although, no doubt, many of the people who live to extreme old age do become enfeebled in mind, yet there is no such invariable rule as the term "precocious" implies, and, speaking without a statistical basis, one can only say that it is probable that more persons above the age of eighty are unimpaired than are impaired in intelligence. The term "partial," as applied to dementia, may be understood in either of two senses. It may refer to the degree in which the whole of the faculties of mind are impaired, or it may refer to the several faculties as being impaired singly, the others remaining intact. In the first sense the term "completely demented" is not infrequently used, but a moment's consideration will show that if a person is completely demented, if, that is to say, the whole of his mind is lost, he must be totally unconscious, and therefore, although the term is accurate when applied to coma, it is inaccurate if applied to any loss or defect of mind short of coma. Any person who is demented to a less degree than this suffers from partial dementia. In the second sense, the term "partial dementia" raises the questions whether (1) any one or more faculties of mind may be impaired while the rest remain intact; and (2) whether, if this does not occur, one or more faculties may be impaired to a graver degree than others. The occurrence of aphasia conclusively settles, to my mind, the first of these questions. In aphasia that part or faculty of mind that is concerned with the correct use of words is impaired, without, as far as can be ascertained, any sensible impairment of any other faculties beyond those that are concerned with the correct use of words. This single case is enough to establish the position, but if other cases were needed it would not be difficult to adduce them. *Folie du doute* is one; loss of memory for other things than words is another. Responsibility, that is to say liability to punishment, is determined by the same rules in clinical dementia as in other cases of insanity. Finally I desire to emphasise once more the existence in every case of insanity of the negative factor as well as the positive factor. It is in such cases as clinical dementia and stupor alone that the negative factor, being but little complicated with a positive factor, is recognised. In cases of systematised delusion, of acute mania, and so forth, the positive factor is so prominent that it is usually forgotten that there is any negative factor at all. But from the broad philosophical point of view the positive incidents are mere accidents. The material factor in the case, the factor which gives it all its significance, is the negative factor, the loss of faculty which allows, by loss of control, the positive factor to occur. What is important is not the delusion, but the loss of judgment that would prevent the delusion from being entertained. What is important is not the outrageous conduct of the maniac, but the loss of inhibition of conduct that allows the conduct to occur. These losses are what I mean by the unminding, the deprivation of mind, the *dementing* in a literal sense to which I attach the term "dementia."

Dr. HAYES NEWINGTON said that this question was one on which he had formed somewhat decided opinions many years ago, and the papers now read focussed very well a difficulty which had arisen of late years as to what was included in dementia, and especially as to what was meant concerning the recoverability from, or curability of, dementia. Sometimes he had had the misfortune to find himself in strong opposition to Dr. Mercier, but in this instance he was strongly with him. The most important element from the clinical point of view was as to whether a dement would get well or not. Members would recollect the discussion which ensued when Dr. Robert Jones read a paper some time ago on "Dementia Præcox"; members got into controversy on the question whether the term "dementia" could properly be applied to a curable condition. Some said that certain cases of dementia præcox did get well, but Sir Thomas Clouston said if they did get well they could not be cases of dementia præcox. It was all very well in the old days, when alienists had separate bags into which one could put cases of melancholia, dementia, general paralysis, and he believed some people would go so far as to

include moral insanity and monomania. The more one tried to specialise the term "dementia" the more one departed from the view that dementia was not a disease, but a diseased condition. One might just as well try to classify anæmia, or fever, or any other general condition. No one wished to describe a case as one of tuberculous anæmia, yet such a description could bear a resemblance to the effort to make a classified disease of dementia. He thought the time must come when they must make up their minds whether dementia was curable or not. He repeated now what he had said once before when Dr. Jones spoke: it was all very well to try to patch our English classification with German cloth; it could not be done. The German classification was doubtless very scientific, but whether it was useful practically was quite another question. British alienists had got their own classification, but it would be impossible to continue it if they were going to take a term out of the German classification and apply it to English cases. If that were done there was sure to be confusion sooner or later, and it would be a very great step if this Association, or some body representing psychiatry, whether in this country or for the world generally, would meet and settle that question once for all, namely: Is dementia to be used in the sense of a disease, and an irrecoverable one? He believed that there would be no accepted classification until that was settled.

Dr. ROBERT JONES asked that he might say a further word in order to fix the discussion. The question was not one of terminology only. What he meant was that there were certain kinds of cases in fully developed adults which exhibited weakness *ab initio*, and one wanted to define those cases and give them a name. In them there was, from the first, a weakening of the mental powers, and he maintained that that weakening was irregular in its incidence and course. It might affect cognition, or feeling, or the conative faculties, but certainly there was often to be noticed a gradual weakness proceeding down to absolute irrecoverability and complete loss of mind power, which was called dementia. What he wanted to focus in the discussion was that there existed such a condition—he was not discussing ætiology, it might be due to a toxin, or stress of some kind producing various toxins—a mental state in which one or other faculty seemed alone to be affected. He called it partial dementia, and asked whether the person so suffering was responsible. Was there a gradual weakening of mind power, attacking one of those unanalysable mental qualities first and leaving the others unimpaired? He gathered from Dr. Mercier's contribution that such was possible.

Dr. YELLOWLEES wished to express the great satisfaction with which he had listened to the paper. He did so because he agreed most strongly and emphatically with what Dr. Jones said about primary dementia. He was quite clear in his own judgment that primary dementia was a condition by itself, and that it began in mental enfeeblement, not only in one of the mental areas, but in all of them more or less, though no doubt it was more pronounced in some than in others. He also believed that that mental enfeeblement was a gradual, progressive and hopeless condition. That was his distinct conviction about that group. But other conditions were continually being mixed with it. Kraepelin called a number of things primary dementia which did not come at all under the interpretation which he, Dr. Yellowlees, had all his life put upon those words. He believed that that primary dementia was a very definite continuous degradation of mind. It might, for a time, seem to stop; one week the patient might be more bright, pleasant and workable than another week, but the general trend was downwards; it might seem slow, and to go on with uncertain steps, but in his judgment it always went on to final and complete mental enfeeblement. That was totally different from using the word "dementia" as he thought it ought not to be used, for conditions such as one saw constantly after an acute attack, when a man was sluggish, inert, and had not come to himself, but was confused. That might be called temporary dementia, but he believed it to be a wrong use of the word "dementia." The latter term, to him, conveyed a condition of mind from which there was no recovery. It was a gradually deepening mental degeneration. As to partial responsibility, there also he found himself in accord with what Dr. Jones said. But he took the practical view, not so much as to partial insanity, as with regard to the partial responsibility which he had always believed insanity often implied. Of course, that was only another aspect of the same thought. He did not know whether there had been in England such definite cases of recognition of partial responsibility as they in Scotland had had. But in the latter country again and again there had arisen the question of

partial mental disorder being regarded by the judge as a reason for modifying the sentence on a person. The most striking case of all was that of a murder committed on the Goat Fell Mountain in the Island of Arran. There was no question about the commission of the deed by the man, and he was found guilty and condemned. For certain reasons, and especially because doubts as to his sanity had been expressed, the Secretary for Scotland appointed a Commission consisting of Sir Arthur Mitchell, Prof. Gairdner and himself to visit that man and report upon his condition. When they went to see the man in prison the hammering was going on outside for the erection of his scaffold, so no time had to be lost in sending in the report. Knowing the gravity of the case, the members of the Commission took very special and great pains over the matter, so much so that they resolved beforehand not to discuss with each other their first impressions of the case, but that each should put into writing his separate convictions about it, and then compare opinions. It was very singular that these opinions were found to agree almost entirely. Before giving their report finally, they sent for the man's relatives and for those who had been employed with him, and for his teachers. As a result they came to the definite conclusion that this man was not sane in the sense that ordinary people were. He had no delusions, but the nature of his inheritance and his history were such, and were so distinctly indicative of mental deficiency, that the Commission reported that, in their opinion, this man was not wholly responsible for his conduct, and therefore in their judgment he ought not to be fully punished as if he had been a thoroughly sane man. The result was that the man's sentence was commuted—not abrogated—and he was dealt with as a man not wholly sane. The execution was stayed and penal servitude for life was the sentence substituted. He regarded that case as an extremely important one, and as establishing definitely the principle of the recognition by law of partial responsibility, and therefore of modified punishment.

Dr. G. M. ROBERTSON said Dr. Jones had asked the question whether dementia might be partial. He thought all the members would answer that in the affirmative. The position was very well described by a simile which their old teacher, Sir George Savage, used to employ. He used to say that dementia was various, and that it was various in the same way as the ruins of a house might be. In one case the house might be destroyed by an earthquake, in another it might be destroyed by fire, and in a third event it might simply fall into decay owing to neglect and age. And, Sir George said, the mind might be similarly destroyed: in some cases absolutely, in others to a less extent, and in still others it might show slight signs of decay in some of its functions. And he went on to add that as there were different classes of houses, so there were also different classes of minds. That put the whole matter very clearly. There could be no doubt that there had been much misunderstanding and futile discussion with regard to the employment of the term "dementia." Dr. Jones had just stated that the Scotch held a particular view of dementia; but the Scotch were in very good company in that respect, because some of the best alienists in France held the same view. It had been pointed out that dementia was not a disease at all, for in disease one found progress, whereas in dementia there was no progress whatever; there was the result of the scarring. It was a terminus, not a condition of disease. And he thought British alienists had been very much handicapped by not having in the language a term for the condition in which the dementia developed. A number of years ago Spitzka, of New York, described a condition which he called "primary mental deterioration," and it occurred to him, the speaker, as a good description for the condition. It did not imply a dementia which was irrecoverable; rather it was a condition of mind in which there was a slow deterioration, but one in which repair might take place. The term "*dementia præcox*" had been very much discussed, and little more need be said about it by him. There was much to be said against the employment of the term, because these cases sometimes recovered. But the same argument might be used about general paralysis. He had a case which was seen by a distinguished neurologist and himself, and the diagnosis made was general paralysis. Yet he had no symptom of general paralysis, so that the name would seem to be a misnomer, in the sense that it was described as being general paralysis when there was no paralysis. But it was well understood what was meant, and ultimately the man was paralysed.

So also one knew what was meant by dementia præcox, and it did not much matter that it was a wrong term.

Dr. SEYMOUR TUKE asked Dr. Yellowlees whether he had followed up the case of the man of whom he spoke; and if so whether he had become incurably insane, or whether he had recovered. He had a curious experience of the same kind not many years ago. He was called in to see a lady who was being prosecuted for ill-treating a young maid-servant. He was called in at the last moment as the trial was to take place next day. He had great difficulty in finding anything the matter with the lady, as she answered questions and seemed to know what she was doing. She was aware of her position and what was going to happen. He discovered, almost by accident, that she had been suffering dreadfully from insomnia, and she had one or two delusions. He went to her counsel and told him there was a grave excuse for the lady's conduct; to all appearances she knew what she was doing, how she was going on, and the consequence of her act; yet, in his opinion, she had commencing degeneration of mind, and circumstances pointed to a progressive deterioration. Counsel thanked him very much, and said he would do the best he could, but that he was afraid it was rather too late to do anything. She was sent to prison for three months. Her condition was reported to the doctors, she was placed in the infirmary for the whole time, and she was not treated as a prisoner but as a patient. She was taken from the gaol to the asylum, and she had never been mentally sound since. In a lesser way that was a case of partial responsibility recognised by the authorities. With regard to dementia he recalled the case of another lady. There was very little that was abnormal noticeable about her, but her people said she was becoming careless and unable to manage her banking account, and was not taking proper care of herself. She was also afraid of being run over. The lady was brought to him for confirmation of the opinion which had already been expressed about her, namely, that there was nothing the matter with her. But he formed the opinion that her mind would deteriorate, and he gave an unfavourable prognosis. The doctor who brought her was astounded at this, and said he had been to one of the greatest authorities in London, who had assured him there was nothing the matter. He, Dr. Tuke, told him he must disagree with that opinion, as there was every reason to fear mental deterioration. About two years from then the lady died absolutely demented.

Dr. YELLOWLEES, answering Dr. Tuke's question, said that the man of whom he spoke was still undergoing penal servitude in Peterhead, and he was recognised so insane that the authorities dare not let him out. He desired to add a word as to the cases of primary dementia which were said to recover. He felt certain that those cases were not true cases of primary dementia, but were rather instances of anergic stupor. The stupor might be so bad that the patient would be not only unconscious of what was said to him and unable to reply, but would become heedless of Nature's wants. He would also refuse food, and have to be fed by tube; and altogether seem as unlikely to recover as a case might well be. And yet such cases were known to make excellent recoveries. That was a distinction between a stupor which was a temporary condition and primary dementia, which latter he held to be the commencement of hopeless gradual enfeeblement. Secondary dementia was marked by mental enfeeblement also, but it was brought on by former acute attacks of insanity which had landed the patient in this hopeless condition. Another type was the dementia of ordinary organic paralysis. No one would think of confusing those cases with those he had been specially referring to. The term ought never to be used in connection with general paralysis at all, because dementia was one of the features of the paralysis. The dementia following hemiplegia was a different thing altogether. To summarise, primary dementia he held to be by itself, and in itself, irrecoverable, and that the cases in which it was said to recover were really cases of temporary anergic stupor.

Dr. CARSWELL (Glasgow) desired to make reference to one or two matters which had occurred to him while hearing the very interesting and suggestive remarks of Dr. Jones. In the first place he would like to say a word in defence of their reputation at Glasgow. They knew the case of the man to whom Dr. Jones referred, and he, the speaker, had had him through his hands several times, so his insanity was recognised in Glasgow as soon as he came their way. The difference was that in Glasgow he was not put into the asylum. He was treated in the observation wards

and thus was tided over the exacerbations of his trouble. In the intervals this man had been able to earn his living. He understood the main point of the present contribution to be the question of responsibility. And it was very important in the connection which Dr. Jones had brought it forward. He was willing to take up the position as Dr. Jones left it, namely, that there were certain cases which presented difficulties in diagnosis, and occasionally caused serious questions of responsibility to arise in the early stages, and that these were cases which for the most part went on ultimately to dementia. What was the state of the law, and what opinions ought to be offered by alienists in connection with cases of that character? He understood that to be the position taken up by Dr. Jones and the question he wished to raise. Dr. Yellowlees had very instructively cited a case which had some bearing on the point. But it had to be remembered that the remission of sentence in that case was due to the exercise of the Royal prerogative. In that case the question of insanity was never before the Court. Indeed, not only was it not before the Court, but it was actually considered and repudiated by the defence. It was not until the young man was found guilty and sentenced to death that, on reviewing the evidence as it had been given in Court, he, Dr. Carswell, took it upon himself to present his view of the man's probable mental condition to the man's solicitors. They replied that all that he submitted had been considered, and they had decided that it was unsafe to plead insanity in the case. However, he, the speaker, ultimately sent his views to a leading Glasgow newspaper, with the result that the Commission of Inquiry referred to was appointed. The subsequent history of the case proved that the man had been, and still remained, insane. His sister was insane, a maternal aunt was insane, and so was his mother's cousin. But apart from the exercise of the Royal prerogative the law in Scotland had been very definitely stated. It had been repeatedly stated in important cases in Scotland to this effect: that where evidence had been given which led a jury to believe, as reasonable men, that there was reasonable doubt as to the state of a prisoner's mind, although they were not convinced that such prisoner had been proved to be insane, it was open to the jury to reduce the charge from the more serious to a lesser one. As far as he was aware, the history of that development of the law was somewhat interesting. He believed that the earliest record of it was a case which was tried at Inverness as far back as 1866 by Lord Deas, who had the reputation in Scotland of being 'the hanging judge.' He was certainly severe, and unwilling to admit fancy pleas in mitigation of crime. A case came up in which delirium tremens was proved, and that judge laid down the law that if the jury was satisfied that the accused was in a state of delirium tremens, though they might not consider it to be insanity, they were entitled to bring in a verdict of culpable homicide or manslaughter. Subsequently that dictum had been expanded, and the late Lord Kinross, Chief Justice of Scotland, and Lord Maclaren, had tried at least three cases of the kind. One was in Aberdeen about twenty years ago, where a man had committed murder, and had followed one person after another and shot at them. No medical man would say the man was insane. Lord Maclaren said that if the jury had reasonable doubt they were entitled to reduce the charge to culpable homicide. This they did. There was also a case of infanticide, where a similar ruling was given by the same judge, and a verdict was returned in accordance with that advice. Lord Kinross laid down the same ruling in a case in which an attendant, an old soldier, shot Prof. Stevenson Macadam. The law was explicitly laid down that although no evidence had been given that this man was, according to medical opinion, insane, still, if the jury entertained reasonable doubt they were entitled to reduce the charge to one of culpable homicide. There was another case, which occurred a few years ago, and he had left it till the last because it bore directly on the point raised by Dr. Jones. It was that of a young man, a Jew, who was tried for murder. The facts were perfectly plain. He had been forbidden the house of his sweetheart by the girl's father, but he had entered the house surreptitiously one morning early and shot the girl dead in bed. There was no proof of mental disorder. His age was only twenty-one. There was proof that earlier in life he had suffered from a distinct nervous breakdown, and evidence was given to the effect that although there was no evidence of acute insanity, there was very reasonable doubt as to this lad's state of mind, and Lord Maclaren, who tried the case, again laid down the law in that sense, and the jury found that he was guilty, not of murder, but of culpable homicide, and he was accordingly sent to penal

servitude for life. This lad is now in the criminal lunatic department, acutely insane. So that in a very few years the potentiality had developed into the actuality. There was no doubt that the lad was now a lunatic, and that he had been already so at the date of the crime, but in the early and incipient stages of what was probably dementia præcox. The law in Scotland was clear as laid down by the judges. There was no Statute law on the subject, and the judges in Scotland in recent years had taken that humane and, as it was believed, enlightened view, which in its results left the person under the observation of the medical officers of the prison, who could deal with any subsequent developments.

Dr. ROBERT JONES said he would not detain the meeting further with a reply, but desired to express his cordial thanks for the comments which had been made, and for the attention with which his contribution had been received. In this country partial insanity was not an exculpatory plea for punishment; such a plea was not recognised, but he agreed with Dr. Yellowlees that such might be advanced as a reason for modifying the punishment.

An Investigation as to the Therapeutic Value of Thyroid Feeding in Mental Diseases. By RICHARD EAGER, M.D.Aber., M.P.C., Senior Assistant Medical Officer Devon County Asylum.

THE history of the use of thyroid extract in insanity dates back to the year 1893, when McPherson (1), of Larbert Asylum, reported a case of myxœdematous insanity which recovered from both the myxœdema and the mental disorder under its use. Its use in cretinism has also met with much success. My investigations, however, are confined to its use in mental conditions not associated with myxœdema or cretinism. In 1894 McClaughey (2), of the District Asylum, Maryborough, reported two cases as improved, and in 1894-5 McPhail and Bruce's results (3) and observations of treatment were published in detail. The publication of their results and their belief that "in thyroid feeding we possess a valuable addition to our armamentarium in the treatment of certain cases of insanity" incited many other alienists to test its efficacy. Besides Clarke, Brush and Burges in America must be mentioned Mabon and Babcock (4), who give a review of the results obtained in 1032 collected cases of insanity from twenty-four different observers, and who show that 23·9 *per cent.* recovered and 29·4 *per cent.* were improved. They also report on a further use of thyroid on sixty-one cases at the St. Lawrence State Hospital.

Dr. Bruce has so far published the largest number of cases, namely eight-seven, and obtained a recovery rate of 42·9 *per cent.* with 21·9 *per cent.* improved. He was first led to try the

effect of thyroid feeding on the insane after reading accounts of various cases of myxœdema treated in this manner, in which the temperature rose from subnormal and the pulse-rate quickened. From this he reasoned that, if one could induce quickened pulse-rates and higher temperatures in the insane, there might be a corresponding mental improvement.

While there is no doubt that in the majority of cases thyroid extract has this effect, one ventures to state that it is neither the elevation of temperature nor the acceleration of pulse-rate which is a determining curative factor, though doubtless they may be regarded as indices of a reaction which in suitable cases prove a forerunner of recovery. There are many co-existing circumstances to be taken into account, and a discussion of these here, though possibly largely of the nature of speculation, may not be entirely without profit.

It would be best to consider the various factors seriatim.

Is the febrile state the cause of the improvement? If it is the accident of pyrexia that is the remedial agency, any pyrexia of a like degree, or existing for a similar period, could be expected to be beneficial. How often pyrexial attacks in the insane due to different causes, such as pneumonia, influenza, etc., or as seen in the so-called "functional" nervous diseases like epilepsy are not beneficial, as far as the mental states goes, but may even be detrimental? Again, there are many who recover after thyroid feeding without having shown any pyrexia throughout the treatment.

Can it be due to the quickened pulse-rate? The latter occurs often enough in the insane, and arises from the same causes as the pyrexia, which it generally accompanies without any improvement in the patient's mental condition. Further, the quickened pulse-rate observed in thyroid feeding cannot be caused by the pyrexia, as the former may occur quite independently of the latter. It must, therefore, be due to some other cause. We find a quickened pulse in many bodily and mental disorders, such as morbus cordis, excitement with or without fever, and in puerperal insanity, and it is to the latter that the tachycardia of thyroid feeding forms the closest analogy, as in both cases it probably is due to the circulation of some toxin in the blood. We shall refer to this point again, but meanwhile it may be mentioned that this quickening of the pulse forms a fairly reliable and constant guide to the altered

blood state, and consequently it is to be regarded as a convenient index.

Rest in bed in itself has certain therapeutic advantages whose value has become widely recognised of recent years amongst alienists in the treatment of acute cases of insanity. It is usually followed by an improvement in the mental condition of the patient, as evidenced by an abatement of the severity of such symptoms as restlessness and insomnia. Correspondingly there is an improvement in the appearance, nutrition and bodily weight of the patient. An extension of this principle has lately been forcibly advocated by Easterbrook in his articles on the sanatorium or rest-in-open-air treatment of insanity (5). It is obvious, therefore, that the rest in bed incidentally necessary for properly carrying out a course of thyroid feeding may be no negligible factor in any ultimate mental improvement observed. But only too often patients who finally improve under thyroid feeding had previously, on one or more occasions, undergone a similar more or less lengthy stay in bed without any appreciable benefit. Accordingly it would be rash to allot any prominent place to this incidental factor in treatment. Undoubtedly milk diet is of great advantage where there is much physical disturbance accompanying the mental symptoms. In these cases it has the same beneficial effect as in feverish hospital patients due to the easy assimilation of the food it contains. Advantages have been claimed for it owing to its being a "purin-free diet." Whilst I have seen undoubted improvement, and even recovery, in a few cases of the insanity of epilepsy, I have not found from the administration of a purin-free diet any justification for the claims made on its behalf by Haig (6) in the treatment of melancholia. One of my colleagues made an exhausting inquiry into the treatment of melancholia by a purin-free diet, and proved to our joint satisfaction that it possessed no therapeutic value. Nor have I found it of much value in maniacal cases where there was no physical disturbance (*e.g.*, indigestion, furred tongue, etc.). In thyroid feeding also it cannot be regarded as exerting any considerable beneficial influence. One is therefore driven to conclude that these aforementioned associated factors may be practically ignored as regards their therapeutic value.

There is evidence in favour of the theory that the thyroid

secretion is very similar in its action to a toxin circulating in the blood, and Sir Thomas Clouston himself seems to view it in this light (7). Referring to the subject he says: "I think we shall some day be able to inoculate some septic poison and get a safe manageable counter-irritant and fever, and so get the alterative effect of such things and the reaction and stimulus to nutrition that follow febrile attacks." In support of this view it might be mentioned that there have been many analogous cases in which recovery from the mental disorder followed on acute toxic conditions produced by a crop of boils, a carbuncle, an attack of erysipelas or typhoid, or, as in one case of Professor Clouston's, dysenteric diarrhoea. There are many toxæmic states, on the other hand, which are supposed to be caused by a definite organism or poison, as in puerperal or alcoholic insanity, and which are supposed to be *the actual causes* of the mental disturbance. We must conclude, therefore, that it is not "any toxin" but "some special one" which might be regarded as beneficial. Insanity itself is coming to be regarded as a form of toxæmia by the majority of alienists (8), and it is possible that the results observed in the cases mentioned above, as well as in cases of thyroid feeding, have been produced by the direct neutralising action of the superadded toxin (thyroid, etc.) (8 and 9), or, more probably, its antibody on the pre-existing toxin which is the cause of the insanity. Different causes apparently excite the same forms of mental disease in different patients, just as the same cause, *viz.* toxin, apparently excites different forms of mental disorder in different individuals. I need only quote as examples of the former the mania following on alcoholic excess or on fevers, and as examples of the latter the mania or melancholia of puerperal insanity. Consequently the mental symptoms which develop from the reception of the toxin in the patient must depend on a functional derangement of the nerve-cells, the particular nerve-cells affected varying in different individuals.

On feeding a patient with thyroid extract the immediate result would appear to be the addition of thyroid secretion to the blood.

Professor Clouston says that thyroid extract then acts as a direct cortical stimulant, but I have only met with one case in which this was corroborated, and it is possible that a much more complex change is brought about by an alteration in the blood state.

Ulterior effects produced after the administration of thyroid extract need not, however, be a direct result of the addition of the thyroid secretion to the blood, for instead of the thyroid extract acting as a substance which destroys harmful substances, it may act intermediately by the excitation of a new or altered internal secretion from some other tissue.

In this connection many observers have pointed out the close relationship between the thyroid gland and the organs of reproduction, and the evidence of this is worthy of careful consideration.

Mr. Ernest Stratford (10) has recently reported several cases of appendicitis accompanied by oöphoritis associated with symptoms closely resembling those of Graves's disease.

Freund says that there is a distinct relation between the functions of the thyroid gland and those of the sexual organs in women. Dr. Leonard Guthrie (11) says that a vast amount of evidence has been accumulated to show the close relationship existing between bodily growth and thyroid activity, and also states that Freund found the thyroid enlarged in forty-five out of fifty pregnant women (12). The latter observer also states that suppression of menstruation is often followed by a goitre, which disappears when the menstrual flow is re-established.

Bruce (13) states that in males the thyroid attains full development at adolescence and then atrophies. In females full development is attained after menstruation is thoroughly established, and the gland remains permanently active as long as any call is made on bodily economy up to the climacteric. If we look at the matter from another point of view, we find that absence of the thyroid is closely associated with certain well-recognised conditions, amongst which is sexual retrogression. Gandy (14) quotes two cases of this nature occurring after myxoedema in two males, æt. 29 and 36 respectively, in whom were found atrophy of the organs of reproduction as well as loss of beard, moustache, axillary and pubic hair. General alopecia and impotence and also myxoedema have been known to follow testicular atrophy the result of traumatism, whereas in cretinism administration of thyroid extract brings about all the signs of puberty.

The effects of reproductive activity on the brain are best exemplified by the changes which occur in the individual's behaviour and mode of reaction to his surroundings at the two

critical periods of life, that is to say, at the beginning and end of maturity.

The outstanding feature of the normal mental state at the beginning of adult life, *i.e.*, at puberty, is brightness, cheerfulness and hopefulness, and the reproduction of the species is the keynote to all the qualities above referred to.

On the other hand, by studying the psychology of the climacteric, *i.e.*, the end of mature adult life, we observe the gradual slowing of life's current marked by feelings of a melancholic type, a conscious loss of power, irritability, and general malaise. These people often conceal their distress, although sometimes on the verge of breakdown. Melancholia is the characteristic form of mental disorder at this period, whereas in adolescence mania is much more common.

It is a matter for speculation whether the secretions from the generative organs have not a very important rôle in the mental states of these periods, and it seems possible that they may act as cortical stimulants and their absence lead to depression. The effects of exhaustion of the reproductive faculty may be observed after sexual excess. The mental condition is one of stupor, and a similar stupor occurs in puerperal cases. It may be that the "stuporosed" condition is the part played by the organism to prevent sexual excess causing still further injury. If a close relationship between the development of the functions of the thyroid and the organs of reproduction does exist, and if the secretions of the latter organs act as cortical stimulants, one would expect to obtain beneficial results in adolescent cases of the melancholic type, on the supposition that there is an internal secretion from the organs of reproduction, the presence of which is necessary for the healthy mental state at this period, and which is capable of being stimulated by the administration of the thyroid extract. In all post-climacteric cases, however, the inability to produce this internal secretion would lead one to expect failure from such treatment.

General Lines on which all Cases were treated.

Having briefly considered the way in which thyroid extract may operate I now pass on to a description of the method adopted in its administration.

McPhail and Bruce both agreed that the best average dose to produce the results aimed at is 60 gr. of thyroid extract a day in three doses. I have accordingly followed these lines in all the cases recorded. Abundance of ordinary food was allowed during treatment, but no extras were given nor any other medicine of any kind except an occasional aperient when the bowels were very constipated.

The patients on whom observations were made were all put to bed one or two days before the treatment was started, and besides the usual records of temperature, pulse and respiration, a twenty-four hours' sample of the patient's urine was saved and examined. The day before the thyroid feeding started all the patients were weighed and physically examined, in many cases also a blood-count was taken.

The thyroid treatment extended over fourteen days in most cases, but in a few instances, where the temperature rose to 101° F. and the pulse to 120, it was considered more prudent to temporarily or permanently stop its administration. The patients were throughout treatment weighed weekly. Records of the temperature, pulse and respirations were continued for a day or two after the feeding was stopped. The physical condition of the patient was again gone into, and in many cases the blood and urine were again examined. All patients were put on two pints of milk and a milk pudding daily, and given syr. ferri phos. 3j, ext. malt liq. 3j *t.d.s.* or ol morrh. 3ss *t.d.s.* Two or three days after the thyroid had been stopped the patient was allowed to get up, and was, as soon as possible, got out of doors and given exercise in the fresh air.

Results obtained.—Of the total number treated 16 were males and 25 females. Of this number 14 recovered (34.0 *per cent.*)⁽¹⁾, 5 were improved (12.1 *per cent.*), and 20 were not benefited.

In only two cases did any immediate improvement in the

CHART I.

1-10.		11-20.		21-30.		31-40.		41-50.		51-60.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	—	4	5	2	8	4	8	2	3	3	1

mental condition result apparently from the administration of the thyroid extract, and in one of these a relapse occurred after the extract was stopped. The ages of those who were placed under treatment are shown in Chart I, which is divided into decennial periods.

The mental condition of the cases when placed under treatment was as follows, Stupor 11, melancholia 14, mania 2, delusional 2, alternating insanity 1, confusional 2, imbecile 1, general paralysis 1, idiot 1, and secondary dementia 4.

In all cases the mental condition had lasted a considerable time and the usual treatment had been given a trial without success. The cases of secondary dementia were treated more with the idea of proving that no benefit resulted from treatment than with the hope of obtaining any success, for it is unreasonable to suppose that success would occur in cases which have reached the stage of confirmed secondary dementia. Nearly all the cases I have recorded, however, were drifting rapidly in that direction and held out no hope of recovery within a reasonable time.

Apart from this fact special selection of cases was avoided. Out of the 14 recoveries 7 were suffering from stupor, 6 from chronic melancholia and 1 from mania.

Of the cases which were improved by treatment one was a case of stupor, who was discharged on trial and did not return but still had hallucinations when discharged. Another was an imbecile who was taken out by friends but returned again in a fortnight. A third was a case of dementia præcox with attacks of katatonic excitement.

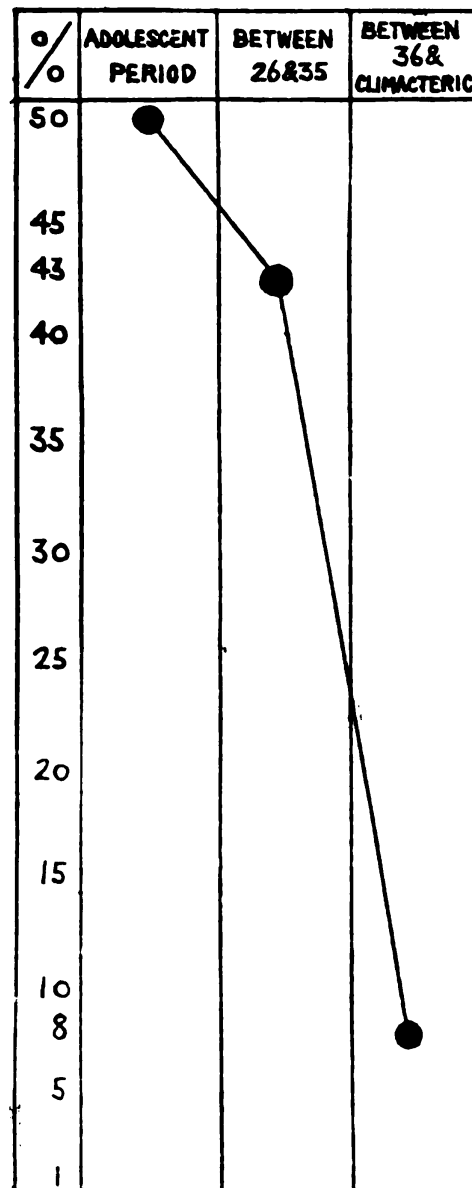
Of the 14 recoveries, 10 are reported by their friends as still well. In 2 cases no reply was received. One case relapsed one year after discharge and has since been two years in another asylum.

Of the cases notified by the friends as keeping well, 1 has been so now for over four years, 5 for three years, 2 for two years, and 2 for eighteen months.

Chart II shows diagrammatically the percentage of recoveries at the different decades. The line falls abruptly, and the nearer to adolescence the more favourable are the results. It is possible that the thyroid extract no longer stimulates the production of some other internal secretion in the post-climacteric cases and so ends in failure.

*Effects produced in Patients by Thyroid Feeding.**The pulse.*—Quickening of the pulse is the first sign noticed

CHART II.



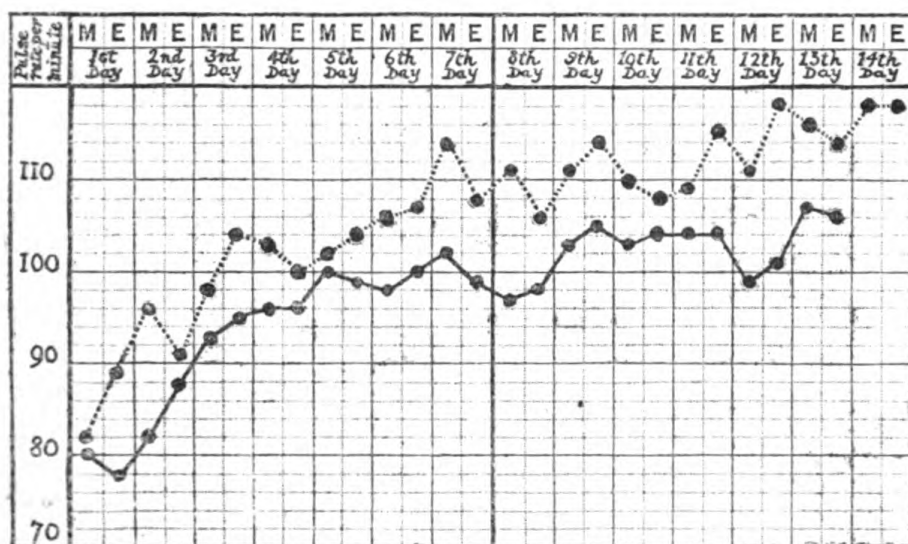
in the patient. Later the pulse becomes soft and feeble. In only five cases was there no appreciable quickening in the pulse, and in none of these did any benefit arise from the treatment. I think absence of response in pulse-rate is a fair

presumption that treatment with thyroid extract will produce no benefit. On the other hand, the cases that benefited by treatment showed this sign in a marked degree.

Chart III shows the average pulse-rate of those who recovered by the dotted line, and the average pulse-rate of those unbenefited by treatment by the continuous line. The respirations were also somewhat increased in frequency during the thyroid feeding.

The temperature.—A rise in the patient's temperature was the most obvious result of the administration of thyroid in

CHART III.



most cases. In four cases, however, the rise was only one from a subnormal to a normal temperature, but never higher than normal; and in six cases there was no appreciable rise at all. One of the latter, however, was a case which ultimately recovered, and showed marked quickening of the pulse in spite of no reaction in the temperature. The highest temperature recorded was 101° F., and occurred on the evening of the fourth day after taking 60 gr. of the extract daily. This patient was roused from her stuporosed condition, but relapsed again during the after-treatment, and required to be spoon-fed.

Desquamation.—Desquamation of the superficial layers of the skin was almost constant after treatment had been stopped, and generally affected the whole body, but was most marked in the palms of the hands and soles of the feet.

CHART IV.

Case No.	Reaction.		Colour.		Specific gravity.		Albumen.		Deposits.		Urea.		Quantity in oz. in 24 hours.		Ref.
	Before.	After.	Before.	After.	Before.	After.	Before.	After.	Before.	After.	Before.	After.	Before.	After.	
4	Ac.	Ac.	Amber	Amber	1025	1030	Nil	Nil	Mucus	Mucus	—	—	—	—	—
7	"	"	"	"	1016	1010	"	"	Nil	Nil	—	—	—	51	—
8	"	"	Straw	"	1010	1022	"	Ft. tr.	"	"	—	—	—	—	—
11	"	"	"	"	1010	1030	"	"	Mucus	Mucus	—	—	60	50	—
12	"	"	"	"	1012	1022	"	V. ft. tr.	Nil	Nil	—	—	48	42	—
13	"	"	"	"	1020	1022	"	"	"	"	2.0	10	—	—	—
14	Ampl.	"	Brown	"	1020	1024	"	Nil	"	"	2.0	10	—	—	—
17	Ac.	"	Straw	"	1025	1022	"	V. ft. tr.	Urates	Urates	1.0	9	—	—	—
15	—	"	Amber	"	—	1020	"	Dist. tr.	—	—	1.9	8	—	—	—
16	Ac.	"	Straw	"	1034	1030	Nil	V. ft. tr.	Urates	Urates	2.0	11	18	32	—
18	Alk.	F. ac.	Amber	"	1010	1020	"	Nil	Mucus	Mucus	1.4	6	72	55	1
19	F. ac.	Ac.	Watery	"	1010	1020	"	Ft. tr.	Nil	Nil	0.6	8	60	48	2
20	Ac.	F. ac.	Amber	"	1020	1020	"	Nil	Mucus	Mucus	1.5	8	54	50	3
22	"	"	"	"	1020	1022	"	"	"	"	0.7	4	22	30	—
21	"	"	"	"	1014	1025	"	Ft. tr.	Nil	Nil	2.0	10	66	54	2
23	"	"	"	"	1015	1028	"	Nil	Mucus	Mucus	1.3	6	44	55	—
26	Alk.	"	Straw	"	1010	1024	"	Ft. tr.	Urates	Urates	0.7	4	38	40	4
27	Ac.	"	Amber	"	1020	1020	"	"	Mucus	Mucus	1.5	7	40	26	2
29	"	—	—	—	1030	—	"	—	—	—	2.0	10	38	—	2
28	"	Ac.	Straw	Amber	1020	1020	"	Ft. tr.	Mucus	Mucus	1.8	9	26	—	2
30	Alk.	"	"	"	1020	1020	"	Nil	Phosp.	Phosp.	1.5	7	40	44	2
31	Neut.	"	Amber	"	1020	1020	Ft. tr.	Dist. tr.	Mucus	Mucus	1.5	7	50	42	—
32	Ac.	"	Straw	"	1010	1010	"	Ft. tr.	"	"	0.8	4	66	70	—
33	"	"	"	"	1010	1020	"	"	"	"	1.1	5	60	70	—
34	Alk.	"	Amber	"	1044	1022	Nil	Nil	"	"	2.0	10	40	40	3
35	Ac.	"	Straw	"	1030	1024	"	Ft. tr.	Urates	Urates	2.4	13	40	44	2
36	F. alk.	"	Pale str.	"	1010	1020	"	Nil	Phosp.	Phosp.	2.5	13	53	34	—
37	—	Ac. str.	Straw	"	1012	1030	"	Tr.	Mucus	Mucus	—	—	56	26	—
38	Alk.	Ac.	Amber	Straw	1020	1010	"	Ft. tr.	"	"	—	—	30	30	—
39	Ac.	"	"	Amber	1020	1024	"	Ft. tr.	"	"	—	—	44	24	—

1. Deposit of phosphates on boiling before and after treatment. 2. Deposit of phosphates on boiling before treatment. 3. Deposit of phosphates on boiling after treatment. 4. Deposit of phosphate before and urate after.

Loss of weight.—The disappearance of fat from the body and rapid emaciation was very pronounced, causing a rapid loss of weight. The greatest loss at the end of seven days' administration of thyroid extract (60 gr. per day) was 12 lb., and this occurred in a male. In the second week this case lost another 6 lb., the total loss being 18 lb. in the fortnight.

The greatest loss of weight, after taking the extract for fourteen days was 19 lb., and this case made an excellent recovery. The average loss of weight was 5 lb. after the first week, and 15 lb. after the second, and in no case in which recovery occurred was this average exceeded. In the latter cases the gain in weight when placed on the previously mentioned after-treatment was considerably more than in those who did not benefit.

There was diminished appetite during the taking of thyroid, amounting to refusal of food altogether in some cases. But after withdrawal of the drug the patients' appetites were much more hearty than before undergoing treatment, and many of them became quite ravenous.

Blood-counts and films were made before and after treatment, but no general conclusions could be drawn from them.

The urine in all cases was examined before and after treatment, and it was found that the quantity passed in twenty-four hours immediately after treatment was considerably reduced in most cases. The percentage of urea on the other hand showed a marked increase, as one would expect from the increased proteid metabolism going on during thyroid feeding. The results shown in Chart IV were obtained by a Doremus ureometer.

The following are the records of two typical cases treated, in both of which recovery resulted, and a third case which did not benefit by treatment.

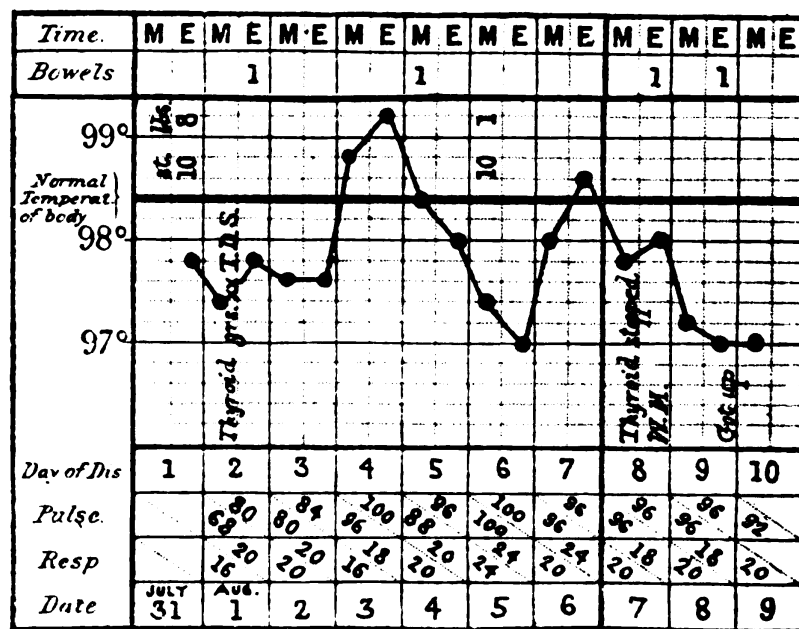
CASE 3.—H. S. C—, æt. 27, occupation, chef, admitted March 28th, 1907.

History.—Stated to have been always active, temperate, and healthy, except for an attack of "hay fever" about six years ago. Patient's mother was admitted here April 11th and died May 4th, 1907, of acute mania.

Certificate states that he is wet and dirty in his habits, refuses his food, and that he has required two men to keep him in bed. Duration of present attack two to three weeks.

Mental condition on admission.—Stupor. Refuses to answer any questions and has to have everything done for him. Generally refuses his food and requires to be spoon-fed. Occasionally after a good deal of persuasion takes some of his food and will then continue with it. Inclined to be restless, getting out of bed and heaping his bedding on the floor.

Physical state.—Well nourished, pale. Weight, 9 st. 7 lb. Pupils equal, somewhat contracted, and react feebly to light but well to accommodation. Knee-jerks present, plantars sluggish, flexor response. Tongue coated with white fur.



Temperature chart (Case 3).

Urine alkaline, opaque amber, sp. gr. 1020, trace of albumen, deposits pus. Heart-sounds normal, pulse 80, regular and of good tension. Lungs: Breath-sounds vesicular. Temperature, 98.0° F.

April 3rd.—Very restless and troublesome; requires padded room.

April 10th.—Getting one hour's outdoor exercise with attendants daily.

July 31st.—Mutism present, non-resistive and slightly kataleptic, no improvement. Has to-day been removed to the infirmary ward. Weight, 10 st. 8 lb.

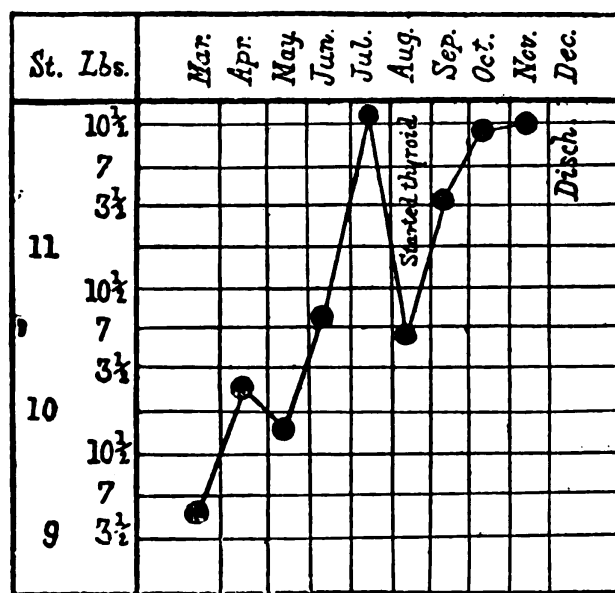
August 1st.—Thyroid started, gr. xx *t.d.s.*

August 7th.—Thyroid stopped.

September 4th.—Has done a little ward work for the past few days, which is the first improvement recorded since treatment. Mutism still present, but is taking his food and keeping himself tidy. Getting ol. morrh. 3ss *t.d.s.*, also two pints of milk and custard daily.

October 22nd.—Spoke for the first time to-day, and tells me he feels better.

November 16th.—Now quite bright and cheerful in his



Weight record (Case 3).

manner and converses freely. Has written two very sensible letters.

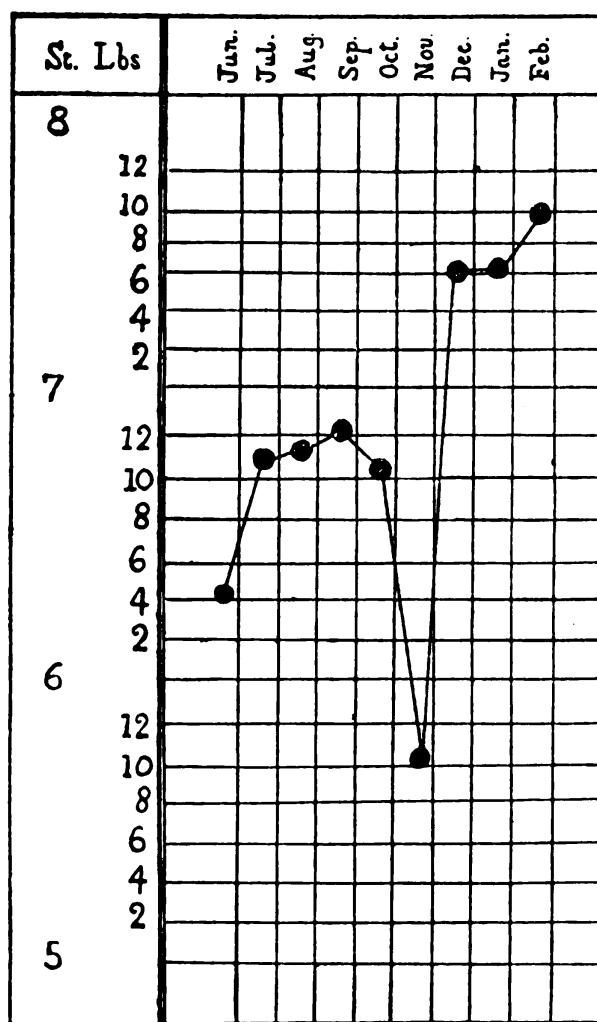
December 1st.—Milk and extracts discontinued. Attends weekly dances and entertainments and maintains mental improvement.

December 14th.—Discharged, and has since (up to December, 1911) remained well.

CASE 36.—M. B. P—, æt. 20, housekeeper to father, admitted June 14th, 1909.

History.—Mother died of phthisis. A brother was admitted here April 14th, 1906, and discharged in October, 1907, after undergoing a course of thyroid feeding (Case 1). Patient has been depressed during the past two weeks.

Mental condition on admission.—Melancholic stupor ; duration two weeks. Is conscious but obstinately mute, and therefore memory perception and orientation, etc., are unable to be tested. Resists all movements and requires to have everything



Weight record (Case 36).

done for her. Assumes a general condition of flexion when left alone.

Physical state.—Rather poorly nourished. Temperature, 97.4°. Weight, 6st. 5 lb. Pupils equal, medium, and react to light. Teeth neglected and decayed. Knee-jerks increased and plantar gives brisk flexor response. Analgesia apparently to pin-pricks. Heart and lungs healthy. Bowels constipated

Urine acid, amber, sp gr., 1020, albumen present, no sugar, deposit mucus.

June 17th.—Tube-fed night and morning.

June 24th.—Tube-fed night and morning daily since June 17th. Took her tea this evening.

July 5th.—Still mute, defective in habits. Has to be led about and coaxed with all her food. Remains standing wherever she is placed. Has been getting ol. morrh. $\frac{3}{4}$ ss *t.d.s.* and two pints milk as extras daily.

August.—Wet and dirty—requires spoon feeding.

November 4th.—No improvement. Has been placed in bed for past two days and physically examined. It was noted that the first sound at the apex was not quite pure, though no distinct murmur could be heard, otherwise her condition is the same as recorded in the notes made on admission. Weight 6 st. 1 lb. Placed on thyroid gr. lx daily

November 19th.—Thyroid feeding stopped, and put on ol. morrh. $\frac{3}{4}$ ss *t.d.s.* Weight 5 st. 11 lb. Examination after treatment revealed no alteration in the physical signs found previous to treatment, but there was well-marked desquamation.

December 20th.—Is now quite bright and cheerful, enters readily into conversation. Takes all her food, extras, and medicine; goes out and about by day, and sleeps well at night.

January 25th, 1910.—Has maintained improvement. Is now in convalescent ward and going down to laundry daily to work.

February 4th.—Discharged.

CASE 26.—J. H. S—, male, æt. 59, bargeman, admitted December 3rd, 1907.

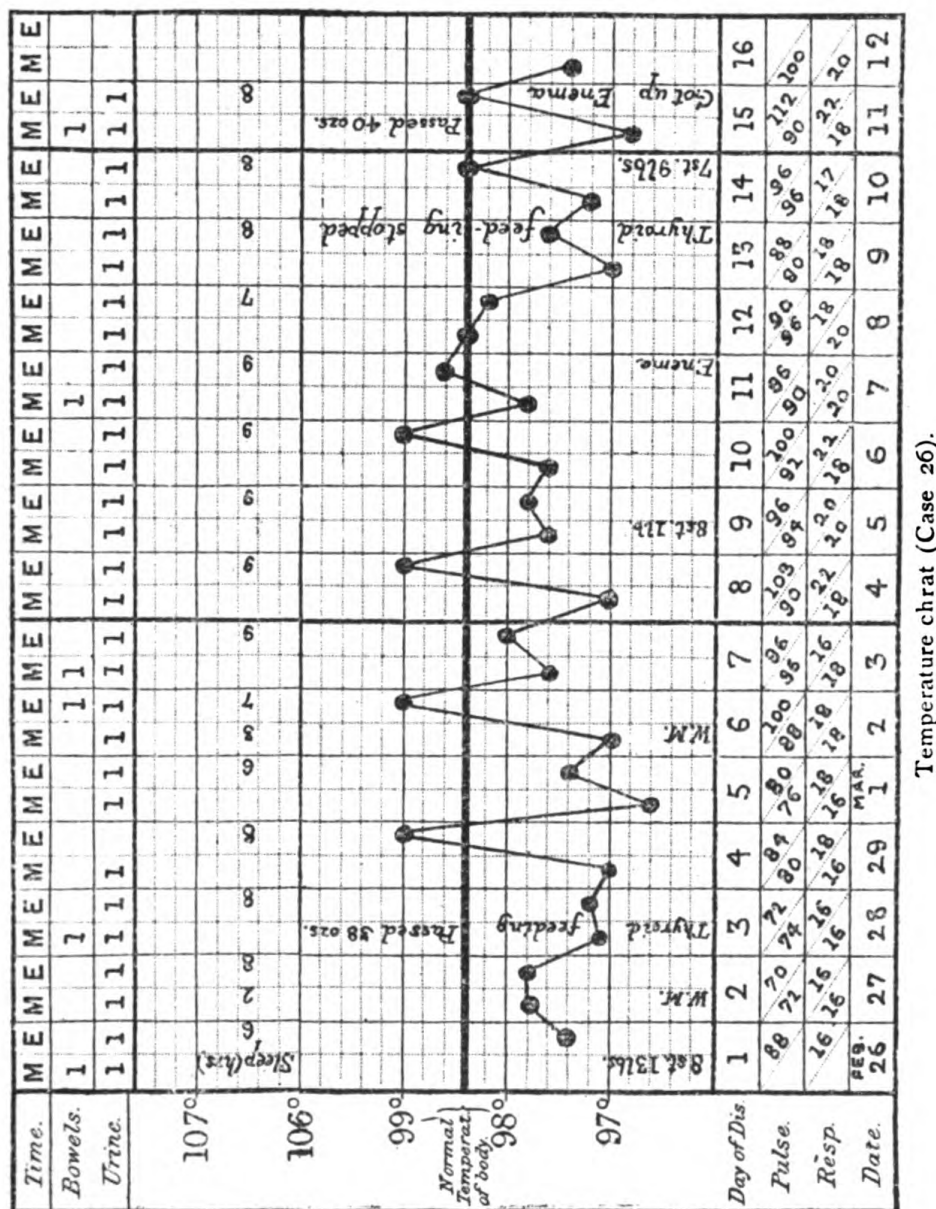
History.—Nephew and niece idiots. Brothers and mother all of melancholic temperament.

Certificate.—Says "he is not able to work, that he has committed the unpardonable sin, and has lost interest in life. Got out of bed one night and tried to throw himself out of window."

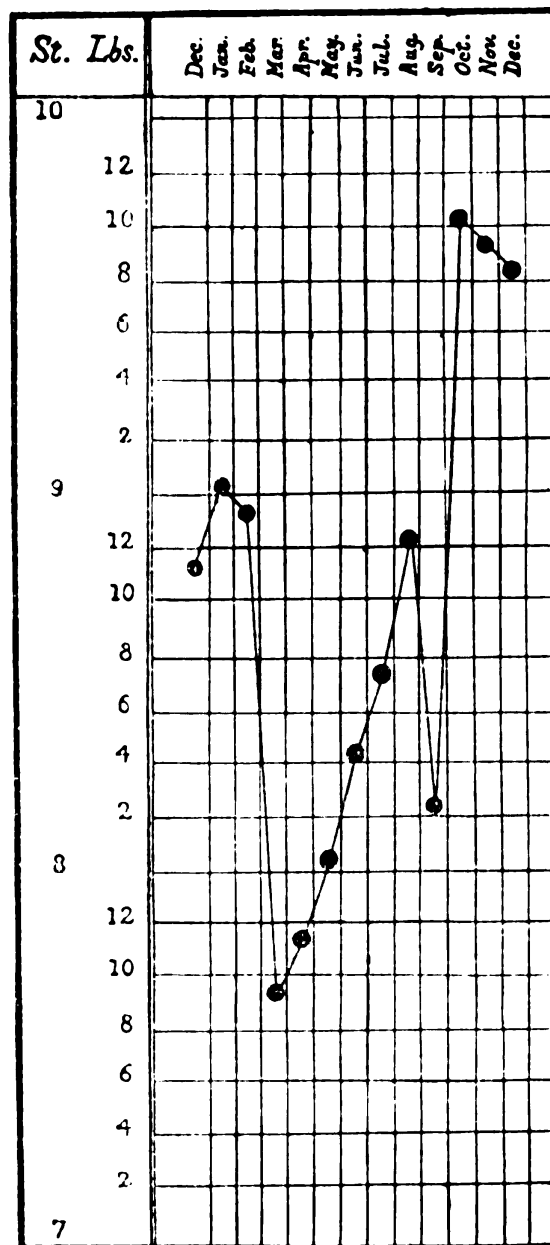
Mental condition on admission.—Melancholia, duration about three weeks. Is aware of his position and surroundings, and memory is good for recent and remote events. Says he has no pain. Attention unimpaired. Troublesome over his food and says he has no appetite. Will give no reason for trying to jump out of window. Denies the existence of

hallucinations. His general affective tone is one of extreme depression.

Physical state.—Fairly well nourished, temperature 97° F.,



442 THERAPEUTIC VALUE OF THYROID FEEDING, [July,
albumen, copious deposit of urates, passes 46 oz. in twenty-
hours.



Weight record (Case 26).

December 10th.—Having Easterbrook's rest in open-air treatment. Restless at night and requires paraldehyde 5ij.

December 17th.—Now getting up daily, but shows no

List of Cases Treated.

Case No.	Sex.	Age.	Mental condition when treatment was started.	Duration since onset of mental symptoms.	No. of days under treatment.	Result.	Remarks.
1	M.	19	Stupor	12 months	7	Recovered	Discharged and reported as keeping well 2 years and 6 months after discharge.
2	M.	18	"	4 "	7	"	Discharged May 7th, 1907.
3	M.	27	"	5 "	7	"	Discharged December 14th, 1907.
4	M.	20	Dementia præcox (dementia)	44 "	10	Unimproved	Died of phthisis 2 years after treatment.
5	F.	51	Stupor	18 "	13	"	Died of dysentery October 24th, 1901.
6	F.	35	Melancholia	17 "	11	Recovered	Discharged November 5th, 1907.
7	M.	60	"	7 "	11	Unimproved	Remaining in asylum November, 1911.
8	M.	36	Dementia præcox (dementia)	14 years	9	"	" " " "
9	F.	23	Stupor	2 months	10	Recovered	Discharged November 9th, 1907.
10	F.	35	"	14 "	35	Improved	Discharged November 3rd, 1907.
11	M.	34	Delusional	+ 36 "	7	Unimproved	Transferred to another asylum December 13th, 1910.
12	M.	54	Melancholia	7 "	5	"	Remaining in asylum 1911.
13	M.	49	"	7 "	10	"	Died December 31st, 1907.
14	M.	42	"	+ 16 "	"	"	Remaining in asylum November, 1911.
15	F.	40	Delusional	+ 24 "	8	"	" " " "
16	F.	42	Alternating (melancholia)	24 "	11	Improved	Relapsed after 4 months, and subsequently died on November 3rd, 1910 (3 years after treatment), from dysentery.
17	M.	7	Idiot	Congenital	10	Unimproved	Taken out by friends April, 1909.
18	M.	32	General paralysis	12 months	9	"	Remains in asylum November, 1911.
19	M.	24	Melancholia	7 "	8	Recovered	Discharged June, 1908 (6 months after treatment).
20	M.	32	Recurrent mania	108 "	12	Unimproved	Remaining in asylum November, 1911.

List of Cases Treated—continued.

Case No.	Sex.	Age.	Mental condition when treatment was started.	Duration since onset of mental symptoms.	No. of days under treatment.	Result.	Remarks.
21	M.	20	Secondary dementia	60 months	10	Unimproved	Remaining in asylum November, 1911.
22	F.	18	Imbecile	Congenital	10	Improved	Taken out by friends but returned in a fortnight.
23	F.	28	Confusional	7 months	11	Unimproved	Remaining in asylum November, 1911.
24	F.	31	Melancholia	9 "	13	Recovered	Discharged June, 1907.
25	F.	50	"	6 "	10	Unimproved	Remaining in asylum November, 1911.
26	M.	59	"	3 "	10	"	"
27	F.	27	"	2 "	14	Recovered	Discharged December 20th, 1908.
28	F.	17	"	2 "	14	"	Discharged August 7th, 1908.
29	F.	28	Mania	3 "	15	"	Discharged October 6th, 1908.
30	F.	26	Melancholia	5 "	14	"	Discharged.
31	F.	31	Confusional	4 "	14	Unimproved	Since died, December 8th, 1910.
32	F.	44	Stupor	10 "	14	Recovered	Relapsed after 2 months in workhouse.
33	F.	27	Melancholia	36 "	14	Unimproved	Remaining in asylum.
34	F.	18	Stupor (dementia præcox)	3 "	14	Improved	"
35	F.	39	Stupor anergic	12 "	16	Unimproved	"
36	F.	20	Stupor	6 "	14	Recovered	Discharged February, 1910 (3 months after treatment).
37	F.	24	"	6 "	14	"	Discharged July, 1910 (6 months after treatment).
38	F.	32	"	4 "	14	Improved	Died 9 months after treatment from pulmonary tuberculosis.
39	F.	40	Chronic melancholia	15 "	14	Unimproved	Remaining in asylum.
40	F.	20	Mania (acute)	4 "	14	Improved	Transferred to another asylum.
41	F.	29	Dementia præcox	3 "	14	Unimproved	Remaining in asylum.

Results of Treatment in Previously Published Cases.

Reported by.	Where recorded.	Treated.	Re- covered.	Im- proved.	Unim- proved.
Bruce . .	<i>Journ. Ment. Sci.</i> , vol. xli, p. 50	27	14	5	8
Bruce . .	<i>Ibid.</i> , vol. xli, p. 636	60	24	14	22
MacPhail .	<i>Lancet</i> , October 13th, 1894	30	14	4	12
McClaughey .	<i>Journ. Ment. Sci.</i> , vol. xl, p. 635.	2	1	1	0
Clarke . .	<i>Trans. Amer. Med. Psy. Assoc.</i> , 1895	5	2	2	1
Brush . .	<i>Ibid.</i> , 1895	6	1	3	2
Rogers . .	<i>Ibid.</i> , 1896	2	1	1	0
Stone . .	<i>Ibid.</i> , 1898	7	4	3	0
Diller . .	<i>Phil. Polyclinic</i> , 1896, p. 381	10	0	1	9
Wright . .	<i>Medical News</i> , vol. xlviii, p. 376	4	0	2	2
Currie . .	<i>State Hospital's Bulletin</i> , vol. i, p. 398.	7	1	2	4
Hrdlicka .	<i>Ibid.</i> , p. 55.	12	1	4	7
Willard Staff.	<i>Ibid.</i> , p. 141	22	0	7	15
Burgess . .	<i>Montreal Med. Journ.</i> , May, 1896	13	2	4	7
Hill . .	<i>Maryland Med. Journ.</i> , vol. xxxv, p. 419	40	5	26	9
Robertson .	<i>Brit. Med. Journ.</i> , 1896	5	0	0	5
Farquharson .	<i>Ibid.</i> , 1896	13	0	0	13
Lord . .	<i>Journ. Ment. Sci.</i> , vol. xliii, p. 654	58	17	13	28
Cross . .	<i>Edin. Med. Journ.</i>	78	18	14	46
Johnston .	<i>Brit. Med. Journ.</i> , September 26th, 1896	8	0	0	8
Shulansky .	<i>Ibid.</i> , Epitome (abs.), 1896	15	0	0	15
Middlemas .	<i>Journ. Ment. Sci.</i> , January, 1899	39	6	27	6
Babcock . .	<i>State Hospital's Bulletin</i> , vol. i, p. 88	13	2	6	5
Babcock . .	<i>Ibid.</i> , p. 218	9	3	4	2
Mabon and Babcock	<i>Amer. Jrn. of Insanity</i> , vol. lvi, October, 1899	39	7	6	26
Totals . . .		524	123	149	252

improvement mentally. Tells the attendants after every meal that it will be his last.

January 2nd.—Has sternly refused all food for the last forty-eight hours; required to be tube-fed to-day, night and morning.

January 18th.—Tube-fed daily—night and morning since last note.

January 20th.—Has taken some milk himself for the past two days.

January 21st.—Tube-fed again this evening.

February 20th.—Has taken his food and one pint of milk

daily by spoon feeding since last note, and also getting ol. morrh. $\bar{3}$ ss *t.d.s.*

February 26.—Taken off extras and put to bed for thyroid feeding. Can with difficulty be made to answer questions.

February 28th.—Thyroid feeding started.

March 9th.—Thyroid feeding stopped.

March 13th.—Getting up, and has been put on ol. morrh. $\bar{3}$ ss *t.d.s.*, two pints milk and a custard pudding daily.

July 14th.—Has shown no improvement, is resistive, will not keep dressed by day, and is in a general way very troublesome, medicine and extras stopped.

November 20th.—Taking his food better, which has accounted for his gain in weight (see chart), but there is no accompanying mental improvement.

May, 1909.—Becoming demented.

November, 1911.—Still remains in the asylum unimproved.

General Remarks and Conclusions.

The disturbing question of how far improvement may have been due to rest and nursing may be met with the averment that it was not until prolonged care and other lines of treatment had been tried for a considerable time and failed to show any improvement in the patient's condition that one had recourse to the thyroid treatment.

The treatment is costly, entails close attention and care on the part of doctor and nurse, and therefore it is of some practical importance to have some idea of the class of case in which it is likely to meet with most success.

It would appear from my own cases that it is not a remedy which is applicable to all forms of mental disorder with a tendency to chronicity, and certainly of no use in cases of secondary dementia, the object of all therapeutic measures being to save a patient from this hopeless condition.

All patients undergoing a course of thyroid feeding should be kept in bed under the observation of a careful nurse by night and day, and the pulse and temperature recorded.

Thyroid extract appears to play the part of a powerful alterative and therefore treatment should not be adopted except when the doctor is able to be constantly in attendance to observe the effects produced on the patient.

It will appear from the results obtained that cases more likely to be benefited by the treatment are those of stupor or melancholia occurring in adolescents, where the condition is not of so long standing that nervous structures are likely to have been impaired to any great extent. Cases of dementia præcox are not favourable subjects for this treatment (15).

Any theory that it acts by producing a toxæmia, although to some extent supported by the fact that the temperature is raised in most cases and the pulse-rate quickened, does not, however, hold good, since it fails to produce any benefit at or after the climacteric; but the theory that it acts by stimulating some internal secretion and likely enough that of the organs of reproduction is in agreement with the fact that it acts most beneficially during the period when the reproductive organs would normally be most active. Finally, signs of improvement must not be looked for during or immediately after the course of thyroid feeding, for they do not appear generally until about four to six weeks after the treatment has been discontinued.

In conclusion I wish to say that I am much obliged to Dr. Davis, the Medical Superintendent, for allowing me facilities for making these investigations.

(1) The recovery-rate taken from the total number of cases published will be found to work out at 23.4 per cent.

REFERENCES.

- (1) *Transactions American Medico-Psychological Assn.*, vol. ii, p. 151.
- (2) *Journ. of Ment. Sci.*, October, 1894.
- (3) *Lancet*, October 13th, 1894, and *Journ. of Ment. Sci.*, January and October, 1895.
- (4) *Amer. Journ. Ment. Sci.*, October, 1899.
- (5) *Journ. of Ment. Sci.*, October, 1907.
- (6) Haig, *Uric Acid in Causation of Disease*.
- (7) Clouston's *Clinical Lectures on Mental Disease*, p. 132; also Dr. Robertson's Morison Lecture, *Journ. Med. Sci.*, July, 1911, p. 45.
- (8) "Toxic Origin of Some Forms of Insanity" (Edwin Goodall, M.D., *Brit. Med. Journ.*, September 30th, 1911).
- (9) Victor Horsley, *Ibid.*, January 30th and February 6th, 1892.
- (10) Lugaro in his *Modern Problems in Psychiatry*.
- (11) *Brit. Med. Journ.*, October 30th, 1909.
- (12) *Ibid.*, September 21st, 1907.
- (13) See also *Encyclopædia Medica*.
- (14) *Brit. Med. Journ.*, October, 1905.
- (15) *Gazette des Hôpitaux*, December 11th, p. 1687.
- (16) *Archives of Neurology*, Harper Smith, p. 159.

Emanuel Swedenborg : Psychologist ('). By HUBERT J. NORMAN, M.B., Senior Assistant Medical Officer, Camberwell House.

IF there is one fact which stands out more plainly than any other when one considers the life and work of Emanuel Swedenborg it is this—that whatever value may be attached to the writings of the later or visionary period of his life, there is no doubt they have served to obscure his eminence as a clear-sighted scientific investigator during the earlier part of his existence. That this is so can hardly be denied even by the most enthusiastic Swedenborgian, for if the average person be asked what associations the name of Swedenborg conjures up, he will at once reply that he was a man who saw visions and dreamed dreams, who said that he saw the heavens opened unto him, and who wrote an account of the same in a work entitled *Heaven and Hell*. A further effort of association will perchance link his name with those of Jacob Boehme, of St. Theresa, of Mahomet, and of others who have exhibited similar symptoms; but, except in rare instances, any conception of his scientific attainments even in the most meagre degree is almost non-existent. He is passed over practically without comment by most of the historians of philosophy or of psychology; and his fate has for the most part been to suffer from the uncritical eulogies of enthusiastic disciples, or from the criticism of those whose knowledge of him is limited to the later period of his life with which his mystical writings are associated. In both cases he has suffered—and the term is used advisedly even in the first instance—because scientific men have been repelled from studying one whom they have conceived as immersed in the business of describing visions of the hereafter and consequently as hardly being likely to have given much time to the concrete realities with which science should deal. Most of the discussions as to Swedenborg's place in the history of thought have centred round the later period of his life; and the mental trouble which came upon him in the midst of his scientific activities and altered the whole course of his intellectual career, sore affliction as it was during his lifetime, has not yet ceased to cling to his name, and to militate against his recognition as one of the clearest thinkers of his

time, or indeed of any time. Rational psychology owes a great debt to him; like many debts it has remained long unpaid. This, too, whilst many an inferior thinker has had his wares cried in the market-place, making of real obscurity an appearance of profundity. It is not proposed herein to deal with Swedenborg in a more comprehensive way than as a psychologist; to do more would necessitate such an acquaintance with science and with technology as but few possess. For it was Swedenborg who "introduced the calculus into Sweden. . . . He began the science of crystallography. He reasoned out before Franklin the identity of lightning and electricity. He anticipated Laplace in the discovery that planets and planetary motion are derived from the sun. He discovered the animation of the brain. The law of the conservation of energy seems to have been anticipated in his doctrine of action and reaction equal and necessary to life." So says a writer in a recent authoritative work (1); and even if the claims be debatable, it is obvious than any discussion of them would but serve to obscure our more immediate purpose, which is to deal with Swedenborg as an exponent of psychology.

Swedenborg was born at Stockholm in 1688, that is, only sixty-two years after the death of the author of the *Novum Organum*, Francis Bacon, the father of rational philosophy and the great exponent of the inductive method of reasoning. René Descartes, chief of the philosophic doubters, had been dead thirty-eight years, and his system of philosophy doubtless still agitated academic circles in Sweden; for, indeed, Descartes succumbed to pneumonia in the very town in which Swedenborg was born. Mention has been made of these two eminent philosophers, for, as will be seen in the sequel, Swedenborg's system appears as a curious blending of the two methods; and, it is almost needless to add, in so far as he departs from the Baconian induction and assimilates the Cartesian theory of occasional causes, so does he become metaphysical and irrational. There was no need for Swedenborg to follow in the footsteps of Descartes, nor, indeed, of any of the philosophers, except it were to glean from them the facts which they had accumulated in support of their theories; the theories themselves were more often than not mere stumbling-blocks on the road of clear thinking, at least in so far as psychology was concerned. The patient spirit of research has characterised but

too few of the votaries of learning ; and even those who have practised this method have, only too frequently, discarded it and lost themselves in the dismal swamp of inferences. And inference might well be called the blight of philosophy, if not, indeed, of theology as well. In the youth of the human race some primitive man, troubled by the effects of an unduly heavy meal, has strange sensations of discomfort ; for these his simple mind can suggest no obvious mechanical cause ; an evil spirit has given rise to them ; successive generations accept blindly the authority of their ancestors, adding further unpleasant attributes as time passes until eventually the conception of a full-blown devil with his attendant imps is reached. This is a crude illustration of the process of thought which takes place, but further elaboration could not make the case more clear. Eventually the demons, gods, spirits and souls are gratuitously taken for granted, and everything is made to square with the inferences of the more primitive minds. Systems of philosophy and of theology result, which are less stable in their foundation than the pyramid balanced on its apex, and which are as easily toppled over when a rational impulse is directed against them. Swedenborg, who is looked upon as a pure mystic, saw this as clearly as anyone : " When the human mind could advance no further," he said, " it admired its last result and accordingly took it for God ; seeking its god from the ground of mere admiration at the point where reason ceases and thought itself is forced to stop "(2). Nevertheless, he himself was constrained by the voice of authority, and, not taking to account his own wise words, he set about the task of tracking a nebulous soul to its resting-place in the human economy, or as he called it, the " animal " economy. That he did not attain this is hardly to be wondered at, for, as he concluded, the soul is an elusive subject. " Upon making the attempt," he says, " I found myself as far from my object as ever, for no sooner did I seem to have mastered the subject than I found it again eluding my grasp." How he could ever have expected to have arrived at such knowledge it is difficult to conceive, for he states in his prologue to the *Animal Kingdom* that " the soul is immaterial"! However, though he held to the theory which had led to the vapourings of the metaphysicians, he yet proceeded in his search in a manner that might serve as a model to the most precise exponent of the Baconian method. It was,

indeed, amazing that Swedenborg, who was Assessor of Mines in Sweden, and who had for years devoted himself to writing on subjects bearing upon his technical work, should, when he had reached the age of forty-five, have embarked upon such an ambitious search as he then did. Previously he had written on such matters as algebra, *Attempts to find the Longitude of Places by Lunar Observations*, on a *Decimal System of Weights and Measures*, his *Philosophical and Mineral Works* (on mining, on iron, on copper, and brass, etc.), and his *Principia*, which "aims to establish a true theory of vortices, founded upon a true system of corpuscular philosophy" (Clissold). There is little scope for the visionary in treating of such matters, nor, indeed, in the subjects to which he now turned his attention—the human body, its constituent parts and their functions. "I intend to examine," he says, "physically and philosophically, the whole anatomy of the body; of all its viscera, abdominal and thoracic; of the genital members of both sexes; and of the organs of the five senses. Likewise, the anatomy of all parts of the cerebrum, cerebellum, medulla oblongata, and spinal marrow. Afterwards, the cortical substance of the two brains and their medullary fibre; also the nervous fibre of the body and the muscular fibre, and the causes of the forces and motion of the whole organism: diseases, moreover, those of the head particularly. . . . Rational psychology itself, which will comprise the subjects of action, of external and internal sense, of imagination and memory, also of the affections of the animus; of the intellect, that is to say, of thought and will, and of the affections of the rational mind; also of instinct." Truly an ambitious scheme and likewise a novel one, so that he might well say, "In order to follow up the investigation and to solve the difficulty I have chosen to approach by the analytic way, and I think I am the first who has taken this course professedly." He undertook this work in no dilettante spirit, but laboured strenuously to acquire all the possible information on the subjects of which he treated. "He made himself intimately acquainted with the works of the best anatomists of his own and preceding ages, and transcribed from their pages the descriptions suited to his purpose, forming what was in fact a manuscript encyclopædia for his own use. He made a notebook also of the technical terms of the sciences. He informs us that he made use of the dissecting room"(3). He also travelled

widely throughout Europe and studied at the various places where opportunity offered ; “ probably wherever in his travels there was an anatomical school he found means of entrance ” (4). In his work on *The Brain* alone he quotes, among others, Vesalius, Willis, Bartholin, Vieussens, Malpighi, Nuck, Littré, Eustachius, Valsalva, Morgagni, Lancisi, Boerhaave, Swammerdam, Pacchioni, Steno, and Leeuwenhoek ; and commenting on them he says in a prophetic strain which time has amply fulfilled, “ The discoveries of these men, far from consisting of fallacious, vague and empty speculations, will for ever continue to be of practical use to posterity ” (5). Such was the method of Swedenborg, and yet George Henry Lewes says, “ The idea of connecting psychology with biology had not yet been distinctly conceived. Although the brain was universally held to be the “ organ ” of the mind, the mind was, by the strangest of oversights, not regarded as the function of that organ ; consequently no one thought of connecting the study of the mind with the study of the nervous system ; no one thought of a physiological basis as indispensable to psychological science . . . The first step may be said to have been taken by Hartley ” (6). But Hartley did not publish his *Observations on Man* until 1748, though it is true that he commenced this work eighteen years previously ; whilst by the year 1745 Swedenborg had completed and published his various works on anatomy, physiology and psychology. Alcmaeon, a follower of Pythagoras and an anatomist and physiologist, had, however, taught “ that the brain was the sole seat of the mind and the source of feeling and movement, and that at the brain arrived all sensation by means of nerves . . . he was led to do this by noting that severing the optic nerves leading from the eyes to the brain produced total blindness ” (7). That was some 500 years before the Christian era, and this, like most rational teaching, had been swamped in the deluge of error of subsequent centuries. In modern times, however, Swedenborg was certainly one of the first definitely to trace the passage of the nervous stimulus through nerve-fibres to the brain. “ The nerve fibres, by a kind of modification or tremulation . . . carry sensations up to their origins or to the cortical substances ” (*Animal Kingdom*) ; and in the same place he says, “ The origin of every sensation is from an external touch or impulse.” The influence of Hobbes is easily to be

detected in Swedenborg's assertions in regard to sensation, and in what may be called his psychological period he is distinctly to be ranked with the sensationalists. Says Hobbes, "There is no conception in a man's mind which hath not first, totally or by parts, been begotten upon the organs of sense (*Leviathan*, Chap. I); and Swedenborg, in the *Animal Kingdom*, "The mind absorbs through the senses all the materials on which it reasons"; "there is, indeed, no other way of knowing and of understanding given us than by the sensations or by experience" (*Soul*).

The *tabula rasa* of Locke is explicitly stated, too, in the following passage: "We are born in complete ignorance, and in process of time our senses are opened; through them impressions are received and sublimated into ideas, which by reason are methodised into doctrines"; and along with this he makes a striking statement in regard to the methods of reasoning which is worthy of note: "Synthesis is nothing but a poor, precocious and vague analysis: it gives out no more than has crept into the intellect by the senses, and to a fragment of experience, frequently distorted, would subdue universal experience. Whence come opinions, hypotheses, theories, systems? These monstrous hypotheses are born, have their day of glory, grow old, die, and are forgotten, but from their ashes broods of new ones spring, which walk as spectres through the earth, and, like enchantresses, distract the human mind perennially. Hence errors, mental darkness, strife, scholastic contentions over straws, and the flight and exile of truths" (*Animal Kingdom*). Never, surely, has there been a more sweeping condemnation of hasty generalisation, nor a more penetrating view of the true nature of deduction as the child of induction. "Our sensations," he says in another place (*Soul*, Sec. 31), "are perfected first, then the internal perceptions, and finally, the intellect; the judgment . . . does not come until late, and in adult life; and because this way is natural and alone permitted, we have to depend upon our observing and collecting of experiments and phenomena of nature. . . . The very truths, causes, and principles of natural things, yea, even of moral things must be learned in the same way." He realised, however, the limitation of our powers of apprehending by the unaided senses what is necessary for a true understanding of phenomena: "The external senses are very obtuse, gross, and

feeble, and thence fallacious, so that they deceive the internal senses themselves in innumerable phenomena taken for truths and appearing to be truths. . . . We may conclude that even these parts, which are the ultimate objects of microscopic vision, also embrace in themselves innumerable smaller parts, even a whole system, so that nature in the least parts still lies hidden far beyond our optical experience" (*Soul*, Sect. 31 and 72). He had definite ideas as to how these sensations passed to the brain, and that it was there that they became transmuted. "The cortical glandule is the last boundary where sensations terminate, and the first prison-house whence the actions break forth; for the fibres, both sensory and motor, begin and end in these glandules" (*Soul*, Sec. 23). There is here also a statement of the difference of the functions of nerves which is of considerable interest; but he had also ideas of localisation of function in the brain itself. "Where the cortical substances are most delicate and most expanded, there the sensations should be more perfect and distinct; for that the cerebrum feels, perceives, and understands, but not the cerebellum, is because the cortical glandules, like so many little sensories, are in a state of perceiving modes distinctly. . . . Thus sensation belongs, indeed, to every cortical glandule, but it is more perfect in one part of the brain than in another" (*Soul*, Sec. 19). He demarcates the anterior province or frontal area of the brain as the seat of intellect: "If this portion of the cerebrum is wounded then the internal senses—imagination, memory, thought—suffer; the very will is weakened, and the power of determination is blunted. This is not the case if the injury is in the back part of the cerebrum" (*Brain*, Sec. 88). It will be observed from this that he draws his arguments on behalf of the theory that in the layers of the cerebral cortex take place the various mental processes, not only from physiology but also from pathology; and he says elsewhere (*Soul*, Sec. 117): "Every imagination at once ceases as soon as the cortical glands are deprived of the faculty of undergoing their mutations; as when they grow cold and are relaxed as in certain diseases, in catalepsy, in morsus tarantulæ, in Vitus' dance, and in loss of memory. The glands are deprived of this faculty when the blood is obstructed, either by the relaxing of the vessels or by something that hinders its return to the veins

and sinuses"; and (Sec. 25) "that the will is such as is the intellect or the perception appears from the phenomena or the affections of the mind, of the animus, or of the brain. For the will increases with perception itself in youths and in adults. When one perishes the other perishes, for they meet in the same organ. When the brain is injured, compressed with foreign matter, or disturbed in its order, not only does sensation become unsteady according to the degree of injury, but also action, as in loss of memory, in catalepsy, in lethargy, in sleep, and other conditions. The reason is that nothing can be carried into the will which does not come from the perception; for the will is the conclusion of the thoughts, and to it belongs the power of acting in accordance with the ideas of the thoughts."

In regard to the exact nature of the impulse which passes along the nerves, and which has not even yet been adequately explained, Swedenborg refers (*Economy*, No. 472) to the "permeability" of the fibres, and speaks of a "spirituous fluid" which passes along them; he compares the nerve-cell to a minute heart, and says that "the nervous fibre, regarded in its simplicity, cannot be better compared with anything than with the artery; for the artery of the brain is continued into the medullary fibre through the medium of the cortical or cineritious spherule, so that it may without doubt be concluded that the fibre is an artery or an artery in a superior degree." That is, some refined substance passes from the artery into the nerve-fibre by way of the nerve-cell: and as there is pulsation in the artery, so there is "tremulation" in the fibre—"This is done perfectly by virtue of the spiritual essence which is in the fibre" (*Animal Kingdom*, pt. iv). It is interesting to note that a similar analogy between artery and nerve-fibre is made use of by Herbert Spencer: "Though unlike the pulses of the blood in many respects, these pulses of molecular motion [in nerves] are like them in being perpetually generated and diffused throughout the body; and they are also like them in this, that the centripetal waves are comparatively feeble, while the centrifugal waves are comparatively strong, to which analogies must be added the no less striking one, that the performance of its office by every part of the body, down even to the smallest, just as much depends on the local gushes of nervous energy as it depends on the local gushes of blood" (8).

Swedenborg was led to his conclusions in this connection by his observations as to the origin of the cells of the cerebral cortex. "The cortical glandules hang down and sprout forth from the sides and coatings of the producing and generating arteries" (*Brain*, No. 329). This, again, may be paralleled in the writings of a modern researcher in this subject, Dr. Bevan Lewis: "The nerve-cells are seen . . . to follow definitely the course of the blood-vessels, and often surround the latter in crowds, and assume with the direction of the vessel a linear or arched course. . . . Such appearances would seem to indicate that the nerve-cells of the cerebral cortex are lymphatic outgrowths" (9). Swedenborg recurs to his idea of "tremulation" in the following passage, where also another modern theory, the protrusion of the dendrites, seems to be outlined; in discussing the senses he remarks: "The images themselves of the sight are elevated along the fibres of the optic nerve, even to all the cortical glands of the brain. Reaching them, they run through them with the greatest rapidity, pervading even their whole fibrous and vascular structure by a kind of most subtle trembling, so that the whole gland is rendered conscious of the image and phenomenon of sight. . . . The gland undergoes a change of state which very nearly corresponds to the inflowing image or object, for it either contracts or expands, or assumes a more perfect form, or distorts itself into one more imperfect, since the entering of what is harmonious exhilarates and expands the sensory, while anything that induces discords binds and distorts" (*Soul*, Sec. 97).

Swedenborg, having discussed the nature of the incoming impulse, and having decided that "external sensations reach no goal beyond the cortical spherules, since these are the beginning of the nervous and medullary fibres," decided that "it is the cortical substance collectively that constitutes the internal organism, corresponding to the external organism of the five senses"; "this cortical substance," he says, "is the unit of the whole brain; in this unit or substance then we ought to find that superior power of which we are in quest. Therefore in this, and not in any ulterior unit, because the cortical substance is the ultimate unit of the brain, we ought to find the soul's faculty of understanding, thinking, judging, willing" (*Economy*, 191 and 304). And, again, he reiterates,

"We have first to learn what sight properly is, and what is perception, imagination, memory, image, idea, as also what their differences are. At the outset it is to be observed that these all are effected in one organ or sensory, that is, in the cortical substance of the brain" (*Soul*, Sec. 100). He proceeds to describe how he conceives the sensations to be recorded: "Memory is all that which is produced by the imagination [or the formation of mental images], or it is the mutability of state itself. For the sensory itself possesses by nature nothing but a potency of changing its state; but that it assumes various states is the result of sensations which constrain the sensory, and by a kind of force bring it into these changes. The particular mutation thus acquired remains, and its quality is known by the images impressed. Hence a particular mutation which exists in potency is a part of the memory, while a particular mutation which is in act is a part of the imagination. Therefore, the ideas of the memory are the same as the ideas of the imagination, but they are not reproduced except by an actual mutation; hence the imagination may in a certain sense be called the active memory." He continues, in a passage which might almost be a modern description of the process of "canalisation," "These changes of state are to be acquired by use, culture, custom, in the flowing-in of sensations. Thus the sensory itself becomes accustomed, and learns in time to undergo many changes of state, and thus to enrich its memory. Every mutation, once acquired, remains under the name of memory, and continues present whenever the sensory returns to that same mutation" (*Soul*, Secs. 106-107). He realised also that there is a greater tendency for similar sensations to impress themselves on the brain than dissimilar ones; or that attention is more ready where interest is powerful than where it is feeble: "Into the imagination enter only those things which are similar and in agreement, and these are all particular ideas; from these arise a compound idea which again is, as it were, the part of an idea still to be composed" (*Soul*, Sec. 103).

He passes on in his inductive search to still higher regions of mental activity, or, as we may express it, to describe the more complicated reactions which are usually denominated as intellect, will, judgment, and so on; and, as will be shown presently, he, like others who have attempted to grasp abstractions and use them as explicatives of facts, anon passes into

that hazy-atmosphered region where amidst gods, demons, elves, gnomes, basilisks, sea-bishops, and the like, dwells the variously imagined soul. "Intellection, which is the ultimate of sensations, does not immediately turn itself into will, which is the primary of actions, but a certain thought and judgment intervenes; thus there are intermediate operations of the mind which connect the last of the one with the first of the other. There is a certain progressive series \. . . as intellection passes over into will. Undoubtedly there intervenes the thought which is the last involution of things perceived and understood, and the calling forth of like things from the recess of the memory. But the judging or judgment is the reduction of the things thought into a certain rational form, those things being cast out which have nothing to do with the matter in question; at length comes the conclusion and so the will. The intellection is the first part of the operations of the intellect, the thought is the second part, judging is the third, conclusion is the fourth. All these taken together are designated by the one word 'intellect.' But this gyre is often accomplished with such presence of mind and velocity that it hardly appears that there are so many intermediate parts between the first rational perception and the beginnings of action." (*Soul*, Sec. 24). It might well be added as a commentary on this that it has been a too keen desire to distinguish these "intermediate parts" that has introduced so many difficulties into the study of psychology. The brain process has been divided up by every exponent according to his particular conception, each division has been designated by some high-sounding term, and a welter of confusion has resulted. Much so-called psychology—and most metaphysics—is merely a dispute about words, and we have not yet apparently learnt the lesson which the errors of Aristotelian logomachy should have taught. It is the more amazing that Swedenborg, who had so clear a conception of the unity of brain-action, and indeed of body-action, should have failed to notice so great a danger. "We will also contemplate," he says, "the structure of the human body, and show therefrom that there is nothing throughout it but is necessary to the parts and the whole, or but is of use to the subsistence of the whole: likewise that all things therein conspire to a common end" (10). Apparently he lost sight of a fact, which many others who proclaim it

loudly also do—nature does not proceed by leaps and bounds, but that events which are apparently successive are really continuous, that the end is in the cause and is merely a continuation of it. It seems obvious that if this were borne steadily in mind there might be simplification in psychological studies as there has been in other branches of scientific investigation.

It is probable, however, that Swedenborg felt himself constrained by the great authority of Descartes, who had but recently promulgated his theory of occasional causes, or as Swedenborg terms it, “influx,” in the modified form in which he stated it. According to this conception of occasional causes “it was merely by the interference of the Deity that mind and matter were modified in harmony, and that either seemed to influence the other” (11). It is true, of course, that Descartes maintained that, though body and mind were distinct and separate, they met and “combined” (as Mahaffy puts it) “in some inconceivable way in the pineal gland of the human body.” Ueberweg (12), commenting on this theory, says, “Descartes considered body and spirit as constituting a dualism of perfectly heterogeneous entities, separated in nature by an absolute and unfilled interval. Hence the interaction between soul and body, as asserted by him, was inconceivable, although supported in his theory by the postulate of Divine assistance. Hence Geulinx, the Cartesian, developed the theory of occasionalism, or the doctrine that on the occasion of each psychical process God effects the corresponding motion in the body, and *vice-versâ*.”

Leibnitz, who had also a theory which he expressed in the term “pre-established harmony,” and which is similar in many ways to the idea of parallelism, made a caustic comment on the doctrine of the Cartesians: “Occasionalism makes miracles of the most common events, since it represents God as constantly interfering anew with the course of nature.” Swedenborg, in his effort to simplify the conception of the process of the intercourse which takes place between the soul and the body, complicates matters by the introduction of a third factor which he terms the rational mind. This rational mind is intermediate between the soul and the animus, and is acted upon by both, or in Swedenborg’s words, “is born of both.” It is curious to note how he passes, apparently quite unwittingly, from what he has definitely ascertained from his

anatomical and physiological studies, and, leaving his inductive principles behind him, enters into vague speculations concerning a nebulous "mind"—the bugbear of psychology. This is, perhaps, most clearly demonstrated where he is dealing with the question of sight. "Sensations of sight become images of sight; the images pass over into similar ideas; thus in place of the images of sight are substituted intellectual ideas. . . . On the internal sensory itself are impressed as many ideas (as it were immaterial images, if we may use so crude a term) as there are images of the memory and the imagination which are formed and drawn out by the changes of state of the sensory; these immaterial or rational ideas are perceived in the pure intellect or in that most simple cortex in the same way as the images of sight are perceived in the common or external sensory; consequently the ideas themselves are like so many internal sensations with their differences; the ideas thus understood constitute the mind, but only its intellect or thought. . . . When the mind is said to be life and a principle, it is rationally conceived as being a certain quality flowing from the form of its intellectory when affected; and thus as nothing without its organic substance. But we may not stop here; let us go farther. This intellectory or purest cortical substance of the internal sensory can by no means exist or subsist of itself. This ought to consist of substances still more simple, that is, of the most simple of the realm. These most simple substances are what we call the soul in which there is life, and which is the mind itself of its intellectory, and consequently the life of the mind itself. . . . The rational mind [mens] is intermediate between the mind and the animus and participates of both. . . . For a spiritual mind [anima] flows into it from above, and a natural mind [animus] from below, which is the reason why it is called rational; for that it may be rational it ought to participate in both the natural and the spiritual. Thus the more it communicates with the spiritual mind the more eminently rational or the more and more spiritual the mind becomes; but the more it derives from the animus or natural mind the less rational or more corporeal it is. Accordingly the superior mind and the animus meet, and, conjoined in the internal sensory, they put forth their common progeny" (*Soul*, Sec. 306). And he further says, "The mind is the life of the thoughts, as

the animus is the life of the sensations." He was of opinion that there was something added to the incoming stimulus before it became a perception, or before it rose into consciousness; "there is in the animus a certain life which is communicated to the perception of sensation . . . without which there would be no sensations." So tardy was he at times of allowing himself to be paid by words or to be put off by dubious phraseology, that his assumption of some immaterial substance, as it has been termed, to complete his scheme of psychological investigation is the more remarkable. That he was capable of close and reasoned exposition the following passage will illustrate: "If we say that the mind is the principle of all the mutations of the animus, we must explain principle, what it is, where it is, of what nature; for principle is a general word like force and cause, which may be said to be in anything. . . . To explore, therefore, what the mind or superior animus is, we must proceed in the same way as above in the exploration concerning the animus, that organic substance itself; or we must seek out that internal sensory where the mind as it were resides. For that the mind is in the brain is beyond the possibility of a doubt; the state of the mind is the state of the brain; they are so far united that wherever the one is injured, languishes and seems about to die, the other is equally so. It is to be borne in mind that the senses of the external organs through the containing fibres flash even to their beginnings or to the cortical glandules, and that in these surely ought to reside that principle which is in the senses. This glandule has been frequently shown above to be the brain in its least effigy, and there is in it a medullary and cortical substance similar and analogous to that which is seen in the common brain; some such little body, therefore, we have called the internal sensory, and we have observed that these little sensories taken together constitute the common sensory; if, accordingly, there is a similar analogous cortical substance in each such little sensory, it follows that that substance taken together is the particular or internal sensory itself, and that its each least cortical part is an intellectory in which we will suppose is the pure intellect" (*Soul*, Sec. 301). It is doubtful if many passages comparable with this can be found in the writings of Swedenborg's contemporaries, and it surely exhibits a marked advance from much of the Cartesian excogitation!

The doctrine of innate ideas did not escape Swedenborg's observation. It had the authority of Locke and so could not be lightly dismissed. "Locke had but a vague and vacillating conception of the nature of the understanding upon which the senses traced images; or of the processes by which sensation and ideation were effected. He was forced to admit innate faculties, but had no precise conception of what they were, nor of how they operated. . . . Leibnitz himself, though vindicating the necessary co-operation of the mind (the co-operation of subject with object, in Kant's phrase), had no precise conception, and was reduced to mere assumption. Because we are born with certain dispositions, and because thought has certain recognisable conditions, he assumed that we are born with all dispositions, and that all knowledge is simply the awakening of slumbering ideas" (13). Swedenborg, although in his *Economy* he had merely shelved the difficulty by asserting that "There are no innate ideas or imprinted laws in the human mind, but only in the soul," came to the conclusion that because we observe that "the order is natural or inborn, we believe that the ideas themselves are inborn also" (*Soul*, Sec. 112); and also that "there can be no idea of the imagination which is not in the memory, and no idea of the memory which has not been in the sense; hence that all parts of the imagination are insinuated through the senses alone. Consequently that there can be just so much imagination as there is memory, and so much memory as there is experience of the senses" (Sec. 110). He realised, too, that there are differences in the powers of mental development in different individuals; and that the poet has to be made as well as born. "That we are born poets, musicians, architects, mechanics, or whatever else, depends more upon the imagination than the intellect; for there are persons whose little sensories incline and are more easily adapted to these than to those changes of state, and by a natural leading more promptly seize and reproduce one set of ideas than another" (*Soul*, Sec. 121).

Laycock, writing in 1860, laid claim to being the originator of the idea of unconscious mental action or of what is now made so much capital out of by enterprising amateurs in psychological matters under the name of "subconsciousness." Laycock speaks of having "more fully developed that great law of unconscious functional activity of the brain—which he was the

first to demonstrate" (14). Feuchtersleben, in 1847, describes "obscure ideas, or, more properly, sensations with dormant consciousness . . . which are exceedingly numerous. . . . It is they which are active throughout the whole process of the formation of thought, for this goes on, though we are unconscious of it, and gives us the only perfect results, namely, ideas, notions" (15). But Leibnitz had arrived at the same conclusion, and he illustrates the idea in a striking manner in the following simile: "The mind is like unto an ocean of obscure perceptions from which islands of distinct ideas emerge." Swedenborg, in his practical way, deals thus with this same question: "The cortical glands perceive otherwise than do the medulla spinalis and medulla oblongata, and those of the cerebellum otherwise than those of the cerebrum; the former perceive in a general and obscure manner, but these particularly and distinctly. Hence arises a sense which does not reach the consciousness of our intellectual mind. . . . We are not conscious of any other changes than those which affect the cortex of the brain in particular" (*Soul*, Sec. 38).

It has already been pointed out that Swedenborg had a clear conception that noxious factors acting on the body are apt to lead to disorder of the brain processes which underlie mental changes. This is perhaps worthy of further illustration. "Many diseases," says Swedenborg, "pollute the blood. All things causing disease will therefore cause destruction of the mind, thus bad nutriment, poisons, drink, and every kind of intemperance. . . . The mind depends upon the state of the purer blood . . . which, if diseased, drives the mind to insanity, even to delirium, but on the blood being restored to health the mind returns to its normal state. . . . Similar things take place in burning fevers, in apoplexy, epileptic fits, paralytic strokes, in catalepsy, tarantismus, loss of memory in catarrhal disorders and other troubles. These are the ordinary bodily causes. There are also extraordinary causes which injure the cerebrum itself and thus the common sensory or the external form of the sensory, as inflicted wounds, water on the brain, inward tumours, and innumerable like things, some of which can be cured and others not. That the reasoning power of the mind, or the human intellect, and likewise the affections undergo at the same time noticeable changes is confirmed by daily experience. From these causes, which diminish or destroy

the executive faculty of the mind, it can be judged what are the causes which perfect the same faculty, for from an examination of particulars a knowledge of contraries flows. In the meantime this care is most incumbent upon us, that there should be a sound mind in a sound body, or that the body and the animus should only be so indulged that the mind shall always remain sane" (*Soul*, Secs. 427-428).

In the foregoing pages an attempt has been made to depict Swedenborg from a point of view which cannot be called a common one, and, however inadequately, to render justice to him as a psychologist. Only too frequently he has been dismissed from consideration as a mere visionary and a dreamer of inflated dreams; it is hoped that this essay may in some degree help to dispel this illusion. Quotation has largely been made use of in order that the accusation may not be brought that more has been read into the original than it ever contained, and that a gloss of modern knowledge has been imparted to the crude original. "If we wish to shake [a man] in his opinion," says Swedenborg, "we must use reason, and not prayers alone. . . . To convince reason, reason must inevitably be made use of." It is believed that some reasons herein contained will shake the deeply rooted but erroneous opinion that Swedenborg was simply an exponent of mystical lore.

(¹) A paper read at the South-Eastern Divisional Meeting, held at Camberwell House on April 23rd, 1912.

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- (14) T. Laycock.—*Mind and Brain*, Pref., p. xiv.
- (15) Feuchtersleben.—*Medical Psychology*.

Brain and Soul refer to Swedenborg's *The Brain considered Anatomically, Physiologically and Philosophically*, and to his *The Soul, or Rational Psychology*.

The Physical Basis of Mental Disease.⁽¹⁾ By IVY
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IN bringing forward some evidence which would point to the biological course followed by some forms of nervous disease to be considered, I would first of all accept as a working hypothesis two generalisations which apply to all forms of disease. The first of these generalisations is that there is essentially no difference in kind between a physiological and a pathological process. The distinction is an arbitrary one; the course of disease is distinguished from that of health only in so far as it tends to compromise the continuation of a more or less perfect adaptation between the organism and its surroundings. There is no tendency in Nature either to kill or to cure; she is absolutely impartial as to the result of a conflict between organisms and a host; and it is a matter of complete indifference to her as to whether toxins are eliminated or not. In the same way diseases of the mind are the manifestation of a perfectly natural relation of the organism, such as it is, to the environment. If the mental processes are abnormal, it goes without saying that the brain must be acting abnormally whether the stimuli to abnormal action originate in the brain itself or in some other part of the body. For example, if a child with pneumonia be suffering from delirium and hallucinations, as is not infrequently the case, this must be considered a perfectly natural outcome of the relation of the brain to its environmental stimuli outside and inside the organism. The actual stimuli may originate in the intestine from masses of undigested food and the stimuli may play on the brain rendered hypersensitive by the toxins from the lungs; the process and its manifestations, as well as the final outcome, are matters in which nature plays an impartial part. It cannot be admitted that there is any form of nervous disease which does not come under this generalisation. It has been argued by some authorities that because insidious forms of insanity are marked only by the slightest variation from the normal course of mental life, and that because the mental abnormalities are only modifications, and often easily explainable modifications, of normal mental processes, that the so-called insanity originates in these processes, and not in the material substratum of the organism.

The fallacy of such an interpretation is obvious; it is tantamount to saying that slight albuminuria is the cause underlying early disease of the kidneys, or that a slight œdema may have something to do with the origin of circulatory disease. It is only natural that in the milder forms of mental disease the abnormal manifestations of brain activity should resemble normal mental processes; and even in the most advanced forms of mental disease there must be a close resemblance between abnormal ideation and conduct and perfectly normal ideation and behaviour. Even in advanced cases of Bright's disease the urinary elimination is more normal than abnormal; the abnormal constituents do not differ so much in kind as in degree from those of urine from healthy kidneys. It is not to be expected that in kidney disease bile or some other substance foreign to the organ would be the chief constituent of the eliminated fluid. The signs of insanity in any given case are the natural products of normal brain action mingled with the products of abnormal action. This does not, of course, preclude the possibility that under certain circumstances these abnormal products, such as delusions, hallucinations and perverted conduct, may not themselves be the direct stimuli to further abnormalities. The suicidal character of pathological processes is well seen in other organs of the body. A diseased heart, for example, is its own worst enemy; it not only fails to supply sufficient nutrition to the rest of the organism, but it starves itself by its inability to contract and expand properly, thereby increasing its own weakness. In the same way, certain phenomena of abnormal brain processes are in all probability due to the recoil on the brain of its own abnormal products in the matter of ideation and conduct.

The second generalisation which I would put forward as a working hypothesis is that in mental disease, as in all other forms of disease, diathesis is a factor which is of no practical importance from the point of view of eliciting ætiology. What does diathesis really mean? A patient with a "bad family history" comes under observation, and with a feeling of satisfaction as regards the cause of the disease it is concluded that here is a case of the nervous diathesis. But when asked what the diathesis means, the only answer to be obtained is that it is a habit of body, a constitutional tendency, something that is hereditary. Further than that no progress is made, and it

ultimately appears that to apply the term "diathesis" in the elucidation of a case is simply to use this technical term to say that the patient is suffering from the particular disease because it is assumed that apart from the diathesis the disease would not have occurred. A hundred people drink milk from a typhoid-infected source, and presumably from pooled milk; a half or a third of these contract fever. It is no explanation, although it is a fact, that these people have contracted the fever in virtue of a peculiar constitutional proclivity termed "diathesis." Those who have escaped have done so also in virtue of a peculiar tissue tendency called immunity. Some of the evidences of immunity called anti-bodies can be recognised, but no evidence of diathesis has so far been forthcoming. Is there in mental disease any evidence that diathesis throws the faintest light on the ætiology of any one type of insanity? Except in so far as tissue proclivity is not infrequently inherited, this question must be answered in the negative. That certain individuals are predisposed by their natural constitution to gout, rheumatism, and other forms of disease is a well-known fact, and that this predisposition is inherited is also generally accepted, but in addition to the predisposition there must always be a determining factor arising *de novo* in every case. The same thing applies to the part played by heredity in nervous diseases. The disease itself is practically never inherited. There is no evidence that mental disease is inherited more frequently than polydactylism. What is inherited is the diathesis, which by itself can never produce nervous disease; it always requires the addition of some new environmental factor. Thus diathesis could only be an important factor in determining the ætiological forces in the production of a pathological state if it could be shown that certain forms of the same disease could occur in which diathesis does not play a part. When, for example, it is said that diathesis is a factor in the incidence of general paralysis, it is at the same time meant that every case of general paralysis has the diathesis, or if not, how can the one class be distinguished from the other? And it must be admitted that if a case cannot occur without the diathesis, then diathesis is a negligible factor in estimating the ætiological forces in the disease so long as it remains only a term representing no physical or chemical entity in the form of a reaction.

The emphasis laid on heredity in nervous diseases has arisen from a comparison between heredity and congenital or develop-

mental abnormalities. Congenital nervous disease is common ; it is due to malformation in the morphological conformation of the brain or to intra-uterine disease. The most frequent cause of such conditions is syphilis, although it is probable that a variety of material conditions may lead to the acquisition on the part of the embryo of a nervous taint or disturbance. In any case it is necessary to bear in mind that whereas congenital disease of the brain is not infrequent, hereditary disease is a rarity.

Having cleared the ground of these considerations let us examine the phenomena in two types of insanity to see what relationship exists between brain degeneration and mental disease, and what guidance such a relationship affords in the interpretation of the processes underlying the diseases. The diseases to be considered are dementia præcox and general paralysis.

The first difficulty which presents itself in any such investigation arises from the fact that psychology, on which the science of psychiatry is largely founded, dates back to the times of the Greek philosophers, whereas our knowledge of the functions of the brain is of comparatively recent origin. The analysis and correlation of mental phenomena and brain phenomena have not developed *pari passu*, the result being that in mental science we employ terms and standards which possess little or no significance when we come to investigate the functions of brain, normal or abnormal, from the point of view of anatomy and physiology. It is true that, anatomically, the sensory spheres have been more or less sharply demarcated, and that experimental and clinical observation have gone far in this direction to procure an anatomical basis for certain mental phenomena. But the mental phenomena with which the alienist deals are for the most part on a different plane. They have reference to social conditions, they involve the complex participations of different portions of the brain correlated by association fibres. There is no centre, one may well suppose, for attention, sense of obligation and duty, or most of the attributes of responsible conduct ; yet conduct and its manifestations form the data on which the alienist bases his practical conclusions. These higher manifestations of the mental life have their anatomical basis in the development and education of association strands or paths linking up a great variety of brain centres, differing in quality and in number in

different individuals. The existence of such correlating and interconnecting fibres has been definitely determined by researches in embryology and comparative anatomy, although their exact relationship to mental phenomena is still for the most part highly conjectural. It is, however, most probable that a considerable proportion of mental cases owe their origin to an actual interference with, or destruction of, these association fibres, which appear late both ontogenetically and phylogenetically. The complicated movements of walking or dancing depend on a perfect correlation of structures in man and animals, structures which extend from the soles of the feet to the Rolandic area of the brain, and include the indispensable accessory assistance of the organs of sight and hearing. The adaptation of locomotion is thus seen to be extremely complicated, involving the development and education in the history of the species and individual of the most diverse parts of the animal body. The adaptation of mind to its surroundings as expressed in the ratiocination and conduct of experience is likewise a process involved and complicated in the highest degree. It derives its subtle attributes (1) from the history and experience of countless ages, in different varieties of animals, (2) from the normal growth and development of the individual, and (3) from the presence of advantageous social surroundings affording the nutrition and educational influences necessary to its normal activity.

The correlation of a normal mental life may be disturbed in a variety of ways, just as the process of locomotion may become abnormal from an infinite variety of causes interfering at one or more parts of the complicated mechanism. Disease of the posterior columns of the cord, disease of the internal ear, tumour of the brain, peripheral neuritis, are but a few of the processes which will manifest themselves in a disturbance of locomotion. Experimental research associated with clinical and pathological investigation has been successful in elucidating the nature of the processes which produce those disturbances. Is there any evidence to suggest the possibility of a similar solution of the problems which present themselves in psychiatry?

There is perhaps no type of mental disease which has excited more interest in recent years than that now known as dementia præcox. It presents itself in the majority of cases as a dementia of adolescence; there is, however, no denying its

appearance at a much later date. Affecting as it does the most highly and most recently developed aspects of the mental life, it is supposed by many to have its origin in the mental processes themselves. The lack of anatomical data bearing on the subject has tended to give a free hand to those who see in this disease a perversion of mental processes pure and simple. There is, however, considerable evidence for the view that these phenomena of the highly developed psychical centres are a manifestation of disturbances in the nervous substratum of the brain.

The disease begins sometimes gradually and sometimes suddenly. When it begins suddenly it may be in the form of a mania, resembling the delirium of typhoid or cerebro-spinal fever. There may be temperature, leucocytosis, and obvious disturbance of body functions. The acute condition may last months or years, but it spends itself in time, and the patient settles into an ordinary dement. The ordinary dement is a patient who has recovered from his brain disease so far as is possible. The destructive process has ceased and he is now adapted to his surroundings in a manner determined by the amount and quality of healthy brain-tissue at his disposal. He is the locomotor ataxic who, having lost the sensory reflexes from his feet, adapts himself, more or less, by the co-ordinating reflexes from his eyes; he is the man who, having lost the power of his right arm, adapts himself to his wants more or less imperfectly with his left; he is the man with the mitral disease who, though unable to meet the demands of a strenuous life, is still able to adapt himself to the simple claims of existence. True it is that these cases of dementia præcox are subject to subsequent attacks of mania or excitement and depression. These are, however, no part or recurrence of the original disease as a rule; they correspond to the excitement or depression which very often comes on a brain of unstable equilibrium, and, of course, the equilibrium of the brain in dementia præcox has been rendered unstable by the cutting out of the affected areas.

That these recurrent attacks of excitement and depression are not associated with a progressive destruction of the brain is evidenced by the fact that similar cyclic disturbances are frequently observed in long-standing cases of hemiplegia due to embolism or syphilitic endarteritis. The depression or

excitement may be, and undoubtedly often are, manifestations of the same cause, namely, an influence which causes exhaustion or depression even in the normal individual. Indigestion, nervous strain, worry and physical exhaustion may produce a mild degree of depression and excitement in ordinary individuals who are highly strung. The same causes operating on the brain of a dement will produce similar phenomena, only in greater degree owing to the lack of adaptation on the part of the partially destroyed nervous system.

It is not claimed that dementia præcox is a well-demarcated nosological entity like enteric fever or pneumonia. It is a clinical classification including the subjects of mental disease, in the early stages progressive from either an insidious or a sudden onset, but terminating definitely in most cases in a certain stage from which recovery is impossible. In a few cases genuine relapses may be observed, but in most cases when progress of the disease has ceased, they settle down to adapt themselves to their surroundings with the aid of such nervous structures as remain at their disposal.

It is not the case that these symptoms appear first in adolescence. They may appear well on in middle life; and it is almost certain that a considerable proportion of so-called defective children are in reality the subjects of that disease, which, if it first appeared in adolescence, would be termed "dementia præcox."

A child who has been perfectly healthy, bodily and mentally, begins to show evidence of backwardness or waywardness at the age of eight. There is nothing to account for the condition. What is the explanation offered? He or she is put down as a higher grade imbecile; there are those who refer to all cases of dementia præcox in adolescence as high-grade imbeciles; that means no more on the evidence than that they are dement, but it implies without the slightest evidence that they are the subjects of congenital or hereditary disease. It may be that some of them are the victims of a brain deformity, which does not manifest itself till late in life; but there is no other organ in the body which shows a similar proclivity to this form of pathological affection if this be the case. Cases of congenital cardiac kidney or liver disease do occur, but they are comparatively rare, and manifest themselves early in life. There is no reason to believe that imbecility should so frequently first manifest

itself in adolescence, whereas congenital diseases in other organs should show signs immediately after birth. It is far more likely that these cases of so-called imbecility or weak-mindedness which appear in early life, in adolescence, and in late life, and which go a certain length and become stationary, are really cases of cerebritis, giving rise to all grades of brain disturbance and brain destruction, and which, when they pass off, leave the brain with a varying amount of healthy tissue at its disposal. There can be no doubt that there are cases of dementia præcox from which recovery may be practically complete. But even when the damage is extensive, it never progresses in a chronic course to a fatal issue in the same manner as a progressive disease like general paralysis; in fact most of these cases live to an extremely old age.

I have recently had the opportunity of examining the brains of two cases which I put under the category of dementia præcox. One was that of a woman, æt. 65, who for many years had been in a stationary condition of dementia. Her illness had commenced when she was about twenty-five years of age, and at that time she had to be put under restraint on account of what was regarded at the time as mania. For at least the last twenty years of her life the mental condition was not disturbed by any marked storms of emotion or periods of depression, although occasionally she might be slightly excited or depressed. In this patient's brain there were well-marked atrophic changes in the frontal and prefrontal areas.

The second case was that of a young man, æt. 25, who died as the result of an acute appendicitis. His history and whole condition was typical of dementia præcox. In the frontal lobes in this case also there were atrophic changes.

It is not suggested that the primary brain lesion in such cases is to be found in the frontal areas. The atrophic changes may be secondary, and a much more exhaustive examination of the brain is necessary to establish the relation of structure to function in these cases.

Adaptation in Mental Disease.

Whether convolutions, fibres or layers of neurons are primarily affected is not known. The important thing is that in dementia præcox the disease as such stops early, and the patient

goes on afterwards leading a perfectly healthy and normal life so far as his brain admits. He may break down later as a result of over-strain, especially if he has not been confined to an asylum. What is the significance of this? In dementia præcox, as in other diseases, there is an infinite variety in the degree and extent of the damage done. In very slight cases asylum treatment may not be necessary. These patients recover to the extent of the trouble not being recognisable—a very common thing in heart and kidney disease. They participate in an exacting and strenuous life, and there is a breakdown, or possibly a recurrence of the disease. If a breakdown, then the prospect of recovery without dementia is good; if, however, a recurrence of the disease, new areas may be involved, leading to a dementia. Such considerations indicate the necessity of making accurate investigation into the antecedent history of all mental cases. It is only by a careful noting of the clinical course and character of the disease that a later examination of the brain can be of use. It is extremely improbable that these cases go on to gradual deterioration of the brain. The brain in most cases is affected early in life, and as an organ, undergoes little change compared with normal brains after the primary attack has passed off.

An important evidence of the acute character of the onset of some of these cases is to be found in the examination of the cerebro-spinal fluid. Two cases of acute katatonia, with temperature, abdominal distension and foul-smelling diarrhoea came under observation almost simultaneously. In the cerebro-spinal fluid of each there were considerable amounts of globulin, albumen and albumose. There was also in each case a large number of mononuclear cells in the fluid. Syphilis and tubercle were excluded in each case. One patient died, and the other recovered. It was impossible to get a *post-mortem* examination on the case which died, and the other case, which recovered from the acute attack, is now a chronic dement in a stationary condition; the stationary condition has lasted two years. His general bodily health is excellent, but his mental activity has gone.

Adaptation in General Paralysis.

The relation to syphilis is constant. The nature of that relation is obscure. Five, ten or fifteen years elapse after the

infection before symptoms appear, and in infantile general paralysis the patient is five, ten or fifteen years before the symptoms appear. There would at first sight appear to be a long intercurrent period of well-being. Leaving aside all problems of predisposition as regards seed and soil, what is likely to be the natural history of general paralysis? General paralysis would appear to be a chronic encephalitis of insidious origin and extremely slow progress. It begins in all probability while the syphilitic disease is still active, and does not manifest itself symptomatically for a considerable time—it may be five, ten or fifteen years. As in the case of gouty kidneys or cirrhosis of the liver, the disease may be present, giving only occasionally a hint of something abnormal, but not revealing itself in its true colours until the physiological reserve has been exhausted. In general paralysis, careful examination of the history may reveal the existence of transient periods of depression or excitement years before admission to the asylum; there may be the history of an epileptiform convulsion, or a transient paresis, but it is only when compensation has broken down, when normal adaptation has become impossible, that the patient, as a rule, comes under observation. Removal from the abnormal stress of circumstances induced by mental excitement, the rest and quiet of institution treatment with the improved nutrition and administration of drugs may induce a remission. Compensation, so to speak, may be restored, but of course on a different basis from that of normal health, because the damage to the brain is irreparable.

In general paralysis a positive reaction is almost invariably obtained with the blood and cerebro-spinal fluid in the later stages of the disease. It would be a matter of great importance to determine in what proportion of cases of secondary syphilis the cerebro-spinal fluid would be found to be abnormal, because there is every probability that in these cases the blood and fluid would be found to be abnormal during the whole course between the earlier period following the infection and the time when the symptoms of general paralysis become manifest.

As to the immediate factors in the pathogenesis of the disease nothing can be definitely said. It has not yet been proved that spirochætes are actually present in the cerebro-spinal tissues, although the analogy from sleeping-sickness would suggest this

possibility. It is not impossible that the anatomical changes are induced by a more or less permanent effect produced by the spirochætes on the blood-serum of the patient, whereby abnormal products in the serum possessing an affection for cerebro-spinal tissues, and more especially the neurons in definite areas, produce from time to time, depending on other conditions, an irritation of the elements in the brain which are ultimately destroyed. Amyloid kidneys occur in syphilis apart from suppurating cavities or other focal lesions from which noxious substances could be absorbed. The blood in these cases almost invariably gives a positive Wassermann reaction, and it may be suggested that substances in the serum, due to the initial infection, produce a distinctive effect on the small arterioles in amyloid kidneys. These changes may be due to a permanent twist which the metabolism of the body has received from the syphilitic infection, and may possibly continue after the syphilitic organisms have ceased to be active. On the other hand the peculiar latency of syphilis, its temporary abeyance for perhaps ten or twenty years, with subsequent activity, must be borne in mind.

In any case the result of these observations is to indicate that there is a definite structural basis for the symptoms of dementia præcox and of general paralysis; that in dementia præcox the active stage of the disease is short and often acute, and that the chronic dements in asylums are for the most part cases of dementia præcox who have been cured so far as the somatic ailment is concerned, and in whom the dementia is the natural expression of accommodation between such brain as is left and the environment. General paralysis is, on the other hand, a chronic disease; it is gradually progressive; there may be periods of remission lasting for months and even years, but it does not tend to come to a standstill in the same manner as dementia præcox. A general paralytic almost invariably dies as a result of his disease, a case of dementia præcox almost never.

(¹) A paper read at the Scottish Divisional Meeting held in Glasgow on March 15th, 1912.

Clinical Notes and Cases.

Some Cases of "Medico-Legal" Interest.⁽¹⁾ By F. RAINSFORD, M.D., Medical Superintendent, Stewart Institution.

THE question of how far insanity can be pleaded in extenuation of, or as an explanation for, the committal of an indictable offence is one that possesses for me unusual interest.

From time to time we alienists are called upon to express our opinion regarding the mental state of prisoners in cases involving the life of the criminal, and for this reason alone, if for no other, I think a discussion on the points which I hope to raise in this paper may be of interest to the Division as well as advantageous to the profession.

Anyone who reads the medico-legal columns of our Journal must, I think, be struck by the fact that the legal aspect of the question is far from settled, and that the decisions given are frequently dependant on either popular feeling, the caprice of the judge or the attitude of the Crown Prosecutors. Of course, in cases of evident insanity characterised by well-marked delusions, alterations of temperament and manner, the difficulties are slight, but in those cases where the symptoms are not so prominent—in what might be called borderland or incipient cases—the difficulty of giving a decided opinion is most marked. It is for these reasons that the following cases, which have been under my care, all of which had acted criminally, and which were sent here to avoid suffering the legal penalty for their offences, may be suggestive of some discussion.

CASE 1.—M. K— was admitted to the Stewart Institution, September 17th, 1902, æt. 16. He was a nice-looking, well-grown boy, son of a gentleman filling a high official position in the City of Dublin. His history was that for the past three years he had been giving trouble at home. He had been to various schools up to twelve months previous to admission and had invariably misconducted himself. He was idle and lazy, and generally absented himself on every possible opportunity. He was then sent to a public school, and ran away from there on several occasions. From another public school he did the same, so that eventually his parents were obliged to take him home and keep him there. He got steadily worse, stayed out at night, and on one occasion slept in the ashpit adjoining the house, to the great scandal of his family. He was then put into a business house, and after a short time

the manager asked his father to take him away as he was suspected of pilfering. Taken home again it was found that he was constantly stealing, not merely from his own home, but from the houses of those whom he visited, and when taxed with it produced the pawn-tickets. With the money thus obtained he took trips to Liverpool and other places, and generally returned in a most dilapidated condition. He is said to be untruthful and believed to be a masturbator.

He was seen and attended by Dr. Cope, who looked upon him as a case of moral insanity, and in consultation with the late Connolly Norman it was decided to try asylum treatment and so he was sent to me.

As far as I could judge, testing him by the ordinary standards, he was not in any sense insane. He was effeminate-looking, and not very strong-minded, but he was invariably a nice-mannered, tidy, well-set-up youngster, and during the whole time he was with me his conduct gave me no trouble.

He was not fond of reading, but he made himself useful in many ways, and he improved considerably in health and appearance. He used to say that all the trouble at home was caused by the action of his mother, who gave all her attention to his sisters and would do nothing for him. After being here for three months he had so much improved that he was sent to school again, but he ran away after three days and came back here five days after leaving, giving as his reason that it was all work there, no play, and not nearly as good food as here. He stayed on here for some months, paying occasional visits home, always returning at appointed times, and he was finally discharged in November, 1903, after a stay of fourteen months.

He then returned to school and did fairly well, and from time to time I met him in Dublin and learnt from his father that his conduct was quite satisfactory.

Now, had this boy been charged with stealing at any time it is doubtful if any medical man would have been able to convince a judge or jury that he was insane to the extent of not knowing right from wrong or incapable of appreciating the criminality of his actions. He would thus assuredly have been sent to gaol, and would to a certainty have developed into a permanent criminal.

Undoubtedly it takes a man of wide knowledge of insanity and strong in his convictions to sign a certificate of insanity in a case like this. Yet the result, I think, shows that the medical men who did so did the right thing, and probably saved from many troubles a nice young fellow.

CASE 2.—J. V—, æt. 34, admitted February 8th, 1906. Medical certificates state: (1) "Is suffering from kleptomania and other moral manias, and is not accountable for his actions. Is constantly stealing whenever he caught the opportunity, and from his own friends and relatives, without showing any shame at being discovered."

(2) "Mental enfeeblement. Does not admit of having done wrong. Says he has no control over himself, when he sees an object he can steal and get money on it. Cannot account what he does with the money. Has no respect for his personal appearance. Does not mind what he does."

The history of this case is most interesting. Patient was for fifteen years a clerk in a railway, and was looked upon as an exceptionally smart and competent official, and he filled for years the position of confidential clerk to the chairman. Two years before his admission he had an attack of hemiplegia consequent on syphilis, and in consequence had to resign on a small pension. Ever since that attack he deteriorated mentally, morally, and physically. He had no moral sense, stole whenever he could and pawned what he stole, and could never say what became of the money so obtained. He walked through an open window of a house opposite where he was living with his wife, in broad daylight, and took a Gladstone bag and some other things, which he pawned for ten shillings; for this he was indicted, and to avoid imprisonment it was arranged that he should be sent to me. His family history is very bad. His grandmother committed suicide; his father broke down in general practice in Ireland, and eventually died in an English asylum of general paralysis; his great uncle, uncle, and two cousins were insane. I am further informed that his father, who up to the time he broke down in health was a highly respected and respectable medical man, behaved in a similar way after his first seizure, and made away with a lot of family silver, which could never be traced.

On admission, patient is noted to be a tall, delicate-looking man. Somewhat stooped in the shoulders, and the subject of right hemiplegia. Hands long and fingers tapering. He has the appearance of languor and general enfeeblement. He is perfectly rational in conversation, but his manner is languid, and he does not seem to take an interest in anything. His memory is good, and he is free from delusions.

He is later on noted to be going on well, and to be quite satisfied with his surroundings. Has no sense of shame. Will micturate in front of everyone and anywhere he may be. Never seems to mind being found out, and cannot be snubbed. Later, I found that when allowed out to church on parole he was arranging to meet a disreputable woman in the park, and had promised her a brooch which he stole from someone here. In fine he had no moral sense whatever, yet his mental powers were good. He was a fine bridge player, and won first prize in *London Opinion* while with me for solving problems in that game. He was finally discharged "improved" in June, 1906, after a stay of four months.

He was then taken down to the country by his wife and later returned to Dublin, where he got work as a clerk in a mercantile office and for a time did very well. But about a year after his admission here he was caught in the act of stealing an overcoat in the Dublin Bread Company Restaurant and was tried before the Commission. I was asked by his friends to give evidence on his behalf, but the Crown, acting on the advice of the medical officer of the gaol, who said the gentleman was not insane, refused to accept or entertain any plea of insanity. However, after some demur I was allowed to speak. I pointed out to the judge the history of the case, the mental condition which had ensued on the hemiplegia, the family history, and I stated that in my opinion to send the man to gaol would do no good, as that once out of prison he would steal again. The judge was most sympathetic, but said he could only do one or other of two things: either find patient

insane and send him to the criminal asylum (which his wife strongly objected to), or send him to gaol; that he had no power to send him to the Richmond Asylum as a case for treatment, and so he was sentenced to twelve months' imprisonment. Later on his friends petitioned for his release, and I made a long report after a further examination of the prisoner in gaol. When I saw him there he was quite rational and said he could not account for his taking the coat; that he thought it was his own coat as he believed he brought one with him when going to lunch—he had left his own coat in his office; that there was no reason why he should have stolen money as he had 18s. of his own in his pocket and would draw £1 the next day. He was in every respect quite rational, and made no complaints except of the deprivation of tobacco. Notwithstanding my report setting forth all these facts the Crown would not interfere and he served out his sentence.

On his discharge he interested himself in antiques and curios, and for some months made quite a comfortable income buying and selling articles of vertu, but he again got into trouble from pilfering and is now an inmate of the Richmond Asylum.

Now this case illustrates very well the difficulties a specialist is under when called upon to give evidence. Both the prison doctors who had this man under observation stated he was quite sane. Examined by the ordinary legal standards he was. He knew he was doing wrong in stealing. He had sense enough to pawn at full value what he stole. It was, however, evident that the man was abnormal. His thefts were done openly, he exhibited no method or cunning in his actions, he was invariably found out. Yet the Crown Prosecutor says, "I will not allow of any plea of insanity being put forward. I have the prison doctor ready to swear he is sane, and we have had enough of this sort of plea put forward in a case heard the preceding day at the same Commission." To illustrate further the difficulties of procedure I should say that the learned Judge inquired why, when I had the patient under my care, I allowed him to leave, and seemed surprised when I informed him that under the private asylum form on which he was admitted I had no legal power to detain him when his wife, who signed the detention order, asked for his discharge.

CASE 3 is interesting, as it was heard at the same Commission as the preceding case, and it was the fact that he had yielded to a plea of insanity in this case which led the Crown Prosecutor to decline to do the same in Case 2.

G. M. V—, æt. 32. Admitted February 14th, 1907. Medical certificates state, (1) "The performance of acts of the most silly and incomprehensible character with a complete perversion of his sexual functions, indicating a weak intellect and undeveloped mind."

(2) "For a considerable time I have observed in patient evidence of an ill-developed puerile mind. He is abnormally frivolous, flighty, and deficient in will-power. His sexual nature is perverted; in this sphere the natural tendency is completely absent and is replaced by gratification obtained from silly and abnormal acts."

This patient was indicted for unnatural offences against boys under the Criminal Law Amendment Act—known as Stead's Act. Patient is the son of an Army officer who died when he was three years old

and his mother a Spaniard said to be of a highly passionate and unstable temperament marrying soon after, he was brought up by three maiden aunts with whom he has lived ever since. He lived a retired life, was never at a public school, and has mixed very little with other men. He was engaged in a stockbroker's office. About twelve months ago abnormal sexual tendencies were noticed. He got hold of a newspaper boy and gratified himself by stripping him naked and flagellating him; this was followed by mutual masturbation and other indecencies. He got into the hands of the police, but owing to strong influences brought to bear he was allowed off on condition he was sent to an asylum, the Crown Prosecutor saying that all such sexual abnormalities indicated mental unsoundness. On admission I note: "Patient is a medium-sized young man, weak type of face, very voluble, flighty and irresponsible. He seems to have no sense of the enormity of his offence, but realises he has avoided gaol. He is full of requests for all sorts of things; appetite is good and he sleeps well."

Later: "Conversation quite rational. Thinks he must have been out of his mind to do the things he did. Talks vaguely of being always delicate and of being threatened with water on the brain." Some days after admission patient was seen by one of the inspectors of lunatics, who stated that he was not a case which should be under certificate, and he was accordingly discharged and re-admitted as a voluntary boarder, and remained in that capacity here for a month from his admission, when he left.

In no ordinary acceptance of the term could this patient be termed insane. Leaving out of consideration the sexual aberrations stated, no medical man could possibly say there was anything abnormal in either his manner or conversation. He was fairly intelligent, gentlemanly in manner, full of small talk, and while here conducted himself quietly and rationally, yet he did acts of which it is doubtful if such are ever committed by a thoroughly sane and responsible individual. Can we then lay it down as an axiom that all such acts are in themselves evidence of brain disorder? Would any one of us if called upon to advise in such a case be prepared to be so dogmatic?

CASE 4.—G. S.—, æt. 36. Admitted January 14th, 1911.

Medical certificates: (1) "Will not look one in the face, but looks furtively about. Cannot recollect facts within my own knowledge which occurred about a month ago, and gives quite different accounts of his illness."

(2) "Cannot look straight in the face, and is said to have threatened suicide on different occasions."

Patient, who is the son of a Dublin merchant, is one of a large family all of whom are mentally sound, and there is no hereditary predisposition. He is stated to have been always rather peculiar, dull, disinclined for, and incapable of, much work. He was for many years with an uncle, a contractor, and never seemed to learn anything, nor was ever of any use in the business. He was then tried in his father's business, but was of no use whatever. For some time past has been addicted to morphia, which he administered hypodermically, and had quite recently to be treated for a septic abscess on his arm caused by a dirty needle.

He has always led a rather solitary life, never showed any disposition for society, and it was suspected that he was a persistent masturbator, his whole appearance giving colour to that idea.

Owing to this habit of morphia his father refused to give him any money, and it was found he stole things from the house and with the proceeds purchased the drug. Recently he consulted a medical man and stole a clock from his waiting-room and pawned it, buying morphia with the money. He was handed over to the police and was in Kilmainham Gaol for some time on remand, when he was discharged conditional on his being sent here.

He had been for some time without the drug when admitted here, and consequently one did not look for the typical appearances of the morphino-maniac in him.

He is noted as a dull-looking man, healthy appearance, shifty expression, and furtive generally in demeanour. His conversation is rational, and he exhibits no signs of confusion of ideas nor delusions. He states he was first led to take morphia by seeing it administered to his mother to relieve distress of heart disease, that having neuralgia he tried it, and being told by a medical student that as long as he confined himself to gr. iij a day it would do him no harm he persisted in taking it. He says he took it at intervals for some years, but had been taking it constantly for last six months, and that his usual dose *per diem* was 6 gr. of combined morphia and cocaine.

He never showed any signs of insanity while an inmate here, and though his manner was odd and he held down his head and averted his face while talking, yet his conversational powers, though limited, were quite rational.

He was seen on February 5th, 1911, about one month after admission, by one of the inspectors of lunatics, who writes: "Mr. G. S.— is a case of morphia habit and has got into trouble with the police for larceny. This may be a case of moral degeneration, but he does not appear to exhibit any symptoms of insanity, nor do we consider him a suitable case for asylum care. Under the circumstances we think he should be discharged at an early date."

Acting on this I called upon his friends to remove him, which was done on the 11th, since when I have heard nothing further about him.

Now I think these four cases exemplify what I have been trying to set forth, *viz.*, the uncertainty of the law in dealing with the question of insanity.

As further illustrating this point I may quote the cases reported in the Journal, January, 1899.

Reg. v. Copeland—where a woman, *æt.* 28, was found lying in three feet of water with a child under each arm. She was restored, but the children were dead. On being rescued she said: "She had been put about and didn't know what to do with herself. She had had no sleep, was very ill, and her husband was angry with her." It was proved she was weakened by illness and recent operations and it was suggested her mind was thereby weakened. Verdict: *Guilty*, but *insane*.

Reg. v. Viney: A labourer, æt. 72, murdered three children and tried to murder a fourth.

It was proved that for some time before the prisoner had been considered of unsound mind. The prison doctor said he was of weak mind but he could not certify him as insane. Prisoner told him that a power of darkness came over him and he thought it right to kill the children so that they might go to a better world. Verdict: Guilty, with extenuating circumstances.

Commenting on these two cases the Journal says: "Very similar, but stronger evidences of insanity in Viney's case than in Copeland's, yet Viney was found guilty and Copeland insane. Clearly one of these verdicts was wrong. Are we then to blame the law? Scarcely. Under the same law that condemned Viney, Copeland was found insane. The discrepancy is to be found in the fact that the judges were different, the counsels different and the juries different. So long as the personal element in trials remains, so long will there be a discrepancy in verdicts."

Herein is my contention borne out, that though the law may be settled on the subject there is no certainty, as the counsel or the judge may or may not be sympathetic to the plea. In Copeland's case, as quoted, it would not appear that any evidence of insanity was given, yet she was found insane, probably because she was a woman, and young, and to murder her own children was considered in itself evidence of mental unsoundness, and she had the sympathies of the jury; but Viney, who was an old man of seventy-two, who his neighbours testified was looked upon as unsound of mind months before the commission of the crime, and whom the prison doctor thought was mentally weak, was found guilty. Take another case:

Rex v. MacGregor, *Journal of Mental Science*, April, 1906.

Accused was a manager of a factory in New Zealand. He was found by the owner (Mr. Sargood) in an office in the factory which had been locked by the clerks. Mr. Sargood thought he had been drinking, told him to leave the office, and report himself next morning.

There was a conversation, in course of which the accused spoke sensibly on matters of business, and expressed the intention of taking his own life. He also spoke of troubles he had with his wife. He apparently did not resent Mr. Sargood's action in virtually dismissing him.

Between five and six the same evening accused purchased a revolver and fifty cartridges, and then engaged a cab and drove to Mr. Sargood's house. Mr. Sargood was at dinner, but he was called out, and without any words prisoner fired at him, hitting him in the face but not killing him. When asked if he had killed Mr. Sargood he said, "I hope so," and when first seized said, "Yes, I have done it." To all the spectators and those who saw him shortly after commission of the crime he appeared sober, rational, and calm, though he smelt of drink. On the following morning he said, "I don't even know where I got the revolver. I have no 'down' on Mr. Sargood; why should I? I shall have to admit it. What could a lawyer do?"

The defence was that there was no intention, that the act was that of a broken-hearted, reckless, drunken madman.

In other words, that though drunkenness is no excuse for a crime,

yet it may, by depriving the accused of intention, excuse him from punishment.

The judge, in summing up, said that if a man by reason of drunkenness did not know what he was doing, or was incapable of forming an intention, he would not be guilty, but he pointed out that the purchase of a revolver and cartridges and driving to the injured man's house and shooting at him the moment he appeared were distinct evidences of intention. He added that if prisoner had a delusion that Mr. Sargood had done him a wrong, and did the act to avenge that wrong, then, even if the delusion existed, that was not sufficient to justify a verdict of not guilty on the ground of insanity.

Jury acquitted prisoner on the ground that he was insane at the time the offence was committed.

Now no plea of insanity was raised in this case by the defence, and the judge was quite clear in his instructions to the jury that such a plea could not be raised. Yet popular sympathy with the prisoner was such that the jury were influenced by it, as it appeared he had a wife whose conduct was such that he was driven to drink.

It is therefore abundantly clear that no precise lines can be laid down in any case in which the plea of insanity may be raised. All we, who are called upon to give evidence, can do is to form the best judgment we can on the case, having ascertained the personal history and having made a careful examination of the prisoner. It is for us to say: "Is the prisoner in our opinion insane? and if so, how far such insanity can be pleaded as an excuse for, or in extenuation of, the offence," leaving to the judge and jury to accept or reject our conclusions.

(1) A paper read at the Irish Divisional Meeting held at The Stewart Institution, Chapelizod, Co. Dublin, on April 18th, 1912.

Observations on a Case of Dementia Præcox.⁽¹⁾ By
JAMES PARKER, L.R.C.S. & P.I., Assistant Medical Officer,
West Riding Asylum, Wakefield.

THE following case presents some important features from a diagnostic point of view, owing to its unusual onset and course, and the relative absence of initial symptoms indicative of the actual character of the psychosis.

The patient, H. S—, a Jew, æt. 36, was admitted to the West Riding Asylum, Wakefield, in June, 1911. He came of neurotic stock; two sisters had suffered from insanity; one is at present confined in an asylum, having had three or four attacks, and is obviously a manic-

depressive; the other passed through a stuporose attack, apparently hysterical, eight years ago and has remained well since. The previous history of the patient was, that he was a quiet, socially disposed young man, who followed his employment as a tailor regularly, and who up to the time of his illness was not regarded as abnormal in any respect. Fifteen weeks prior to admission he was involved in a tram accident and sustained a fractured clavicle and dislocated shoulder, traces of which injury he still retained in a slight paresis of the right arm.

He received hospital treatment and on his recovery returned to his home. It was noticed at this period that he was inclined to worry owing to his inability to work, and he also suffered from occasional "attacks of shivering." Whilst convalescing at his home he frequently visited a neighbour, who was regarded as a "spiritualist"; she made some vague predictions concerning the patient, told him he would not live long, and suggested that he should change his religion. These assertions patient was convinced were undoubted assurances of impending disaster. He became terrified, solitary, and apprehensive, and from some stray and bantering jests he began to believe that there was a movement on foot to convert him to Christianity; as a consequence he became exceedingly suspicious and in course of time very depressed. He was admitted in this state of melancholia. He gave a clear and connected account of himself, spoke readily of his delusionary ideas, and inquiry into the latter disclosed a mild systematised delusionary formation which was strictly localised and showed no tendency to spread, the false ideas being founded on some actual basis of fact. He believed the "spiritualist" had cast a spell over him, that he would not live long, and that there was a conspiracy to undermine his faith. Auditory hallucinations were also admitted, but these were referred to vaguely as "voices," and their content was not ascertainable. He exhibited no mental confusion and apprehension was normal; there was distinct exaggeration of the emotional tone, and his conduct was in accord with a state of mild depression. Physical examination, in addition to the previously mentioned traumatic paresis, revealed stigmata—faulty head-formation and features.

Very quickly, within a few days, patient was cheerful, neat in his attire, and a smart and energetic ward worker. Repeated conversations with him disclosed an apparent subsidence of delusionary ideas, and he was now amused at his former credulity. His conduct called for no comment in any particular, and he conversed sensibly, exhibiting a fair order of intelligence. He suggested that he had got into a "low state," owing to his accident; he quite agreed that his stay in the asylum would benefit him, and though anxious to be at home, he was perfectly willing to be advised by us and did not question in any way his continued detention. In due course he was sent forward for discharge and left the asylum recovered after three months' stay.

He was readmitted four days later, the information accompanying him being that on his arrival home he was rather talkative, and on the following day he was distinctly excitable and peculiar in his behaviour; when returning from a walk he insisted on going a very round about way to his home, and on arrival there he became destructive, chattered to himself, and was quite uncontrollable. His certificate stated that

"he is excitable and violent, that he tears and burns things, that he talks nonsense and carries on imaginary conversations." He had greatly altered since last being seen; he now adopts a rather grandiose and pompous style, is very garrulous, and careless and inattentive when spoken to. He was quite aware of his surroundings, and when asked for an explanation of his recent behaviour he replied, "You know all about it; you are a doctor, so you must know all about it"; further information he refused to give. When put to bed his garrulity subsided and he gradually lapsed into a cataleptoid state, being quite indifferent to his environment; he now kept his eyes firmly closed, and he would not reply or obey directions. His apprehension showed no impairment, and emotionally he was buoyant and hilarious, his facial expression being that of extreme self-satisfaction. Negativism became extreme, from slight resistance to ordinary movements, and refusal of food, he eventually required tube-feeding, and retained his urine and fæces. All attempts to induce him to void urine were without result until preparations to catheterise were proceeded with; he then voluntarily left his bed and passed close on 40 oz., smiling quietly to himself. This condition was reached within two days of admission, though there were brief periods, lasting five or ten minutes, during which he was clear mentally, conversed fairly sensibly, and showed a thorough awareness of his position and surroundings. Within the next few days he became deeply stuporose, required regular nasal feeding and catheterisation. This state gradually merged again into talkativeness, which led up to typical catatonic excitement, in which condition he remains up to the present time.

He keeps the head bent forward, appears most unsteady on his feet, and though he dances about in a most agile and clownish fashion he never falls. He sings loudly to himself, breaks suddenly into loud wailing and moaning, his facial expression showing rapid play from grief to exaltation. He is slovenly and untidy, still very negativistic, and, though understanding, he takes no notice of what is said to him. He frequently indulges in stereotyped movements, rolling his head about for long periods; muscular rigidity is present, and he exhibits well-marked "snout-cramp." He is wet and dirty. His bodily health has deteriorated, he being now very emaciated, and in addition he has developed a "hæmatoma auris," possibly the result of injury during his senseless excitement.

From the preceding description it will be seen that the essential features of this case were the following: Subsequent to a somewhat severe physical upset, the patient developed a mild paranoic condition, which subsided a few days after admission to the asylum; a few months elapsed during which there was an apparent freedom from mental disturbance, but very shortly after his discharge from the asylum a typical condition of katatonic excitement supervened, which condition exists at the present time. Whilst the latter phase of the psychosis presents the typical classical picture of katatonia,

which is, of course, quite familiar, yet the earlier manifestations are not without interest, since they did not afford very clear indications of the actual mental disorder from which the patient suffered. The particular question, therefore, which would seem to merit some discussion is: What significance, especially in a prognostic sense, is to be attached to a mild delusional state, persecutory in character, such as the patient presented when first admitted?

Delusional states, of course, occur in a variety of conditions, most of which were clearly excluded in this case. Thus, in manic-depressive insanity, both in the depressed and excited phases, delusional formation is not infrequent, such being, however, accompanied by other symptoms characteristic of this psychosis. Thus in the depressed forms psycho-motor retardation, a mood of sadness, and "divergent" rather than "convergent" delusions are usual; in the excited phases, distractibility, flight of ideas or some defect of thought, with pronounced emotional disturbance, are observed. The absence of these characteristics, therefore, excludes any association with manic-depressive insanity.

Acute alcoholic hallucinosis, a psychosis identified by auditory hallucinations, some degree of mental confusion, apprehensiveness and vague persecutory ideas, did not suggest itself, as patient's history was reliably non-alcoholic. There is, however, one group of psychoses which the paranoid phase in this case closely resembles, and from which it is necessary to distinguish it, since the prognosis is essentially different in the two conditions. I refer to what has been described by Gierlich and Friedmann respectively as "periodic" and "acute curable paranoia"; these cases were composed of certain types of individuals who were constitutionally prone to interpret worrying incidents into a localised system of persecution, and they were more prone to this interpretation when in a neurasthenic state consequent on lowered vitality or severe physical stress; when the exhausting influences were removed, there was a subsidence of delusions and recovery, though complete insight was not regained, and the condition recurred when the patients were again exposed to mental or physical trauma.

Friedmann, from his observations, deduces, "that if an otherwise healthy person, especially a female, begins to fret about a troublesome experience, and then develops delusions

which do not spread, whilst the patient remains clear and *presents no hallucinations*, we have the prospect that the whole disorder will disappear in the course of two and a half or three years."

It is apparent from the preceding that the early paranoid symptoms in the case of H. S— bear a close resemblance to those of "acute curable paranoia," though the subsequent development is essentially different. There is, however, one important factor which serves to distinguish the two conditions, *viz.*, the existence of auditory hallucinations in the case under consideration. This would seem to indicate that the mental disturbance was of a graver nature than that occurring in the cases described by Friedmann and Gierlich, which is limited to delusions that may be regarded as exaggerated forms of similar reactions displayed by many so-called neurotic individuals in everyday life. Such persons, in difficult circumstances, tend to lose their sense of proportion, become morbidly suspicious and apprehensive, even to the extent of developing mild persecutory delusions. When, however, these symptoms are also associated with hallucinatory disorders, it would lead to the suspicion that the abnormal phenomena are the early expression of a definitely deteriorating process, rather than an episode in the mental life-history of a "neurasthenic."

Apart from the existence of hallucinations, there appears to have been no indications which would suggest the diagnosis of dementia præcox; thus the emotional indifference, senseless impulses, disorders of conduct, and fantastic delusions—features usually associated with the psychosis—were entirely absent. Remissions in dementia paranoides are also far from usual.

It is thus seen that dementia præcox may first manifest itself in an atypical form by a mild delusional state, only differing from other mental disorders with a much less serious prognosis by the presence of hallucinations. Since the recognition of this deteriorating psychosis in its earliest stages is of obvious importance, I have ventured to bring this somewhat unusual case to your notice.

(¹) A paper read at the Northern and Midland Divisional Meeting, held at Garlands Asylum, Carlisle, on April 18th, 1912.

Part II.—Reviews and Notices.

A New Logic. By CHARLES MERCIER, M.D., F.R.C.P., F.R.C.S.
London: William Heinemann, 1912. pp. xxvii + 422. Price 10s.

This book is an attempted contribution to logic on the part of one who has won a considerable reputation in another sphere of study. The author explains how the two spheres came for him to be connected. An understanding of normal reasoning, he contends, is an indispensable preliminary to the understanding of morbid reasoning, and therefore logic, no less than psychology, is a necessary preliminary to the study of insanity.

The book is a complete and trenchant criticism of that Traditional logic which goes back to Aristotle and the Schoolmen. Almost every doctrine of that logic is scouted as glaringly false, almost every classification is held up to ridicule as manifestly incomplete or misleading. "My own position," writes Dr. Mercier, "may be thus explained: From traditional logic I differ in every principle and every detail." The attack is, however, directed not so much against Aristotle himself as against the modern text-books which base themselves on Aristotle. "To the examination of logical doctrine in this book I have brought no academic equipment. I pretend to no scholarship in Greek, to no scholastic learning. Any logician can trip me up on knowledge of the pure text of Aristotle" (p. 414). And the modern text-books are accused of slavishly following the Aristotelian account, conspicuously and hopelessly false as it is throughout. It might be thought that Dr. Mercier was therefore writing along the lines of recent logicians like Lotze, Mr. Bradley, and Mr. Bosanquet, who have not scrupled to depart from the traditional formulations. But he is at least not conscious of this, for he constantly expresses his inability to understand even the language of these writers. "Modern logic I confess I do not understand" (p. 13). "Its exponents are either incapable of expressing themselves intelligibly, or they deliberately seek to impart to their writings a spurious air of profundity by the constant use of expressions that are unintelligible. The reason I have not attacked modern logic with the weapon of argument is the same reason that would prevent me from attacking a London fog with a small-sword. There is nothing palpable to attack" (p. 413). It should be added that Dr. Mercier is very anxious to forestall the accusation that his differences from pre-existing systems of logic have been anticipated, or that they are of trifling importance or of a merely verbal nature.

The good qualities of the book lie upon the surface. It is brightly and cleverly written. The style is lucid and unconventional, and the examples are fresh and well chosen. There is much sound "common-sense" in the book, and there is throughout an air of genuine conviction which cannot fail to please. Sometimes an acute point is made, and there will be something of interest for most students of logic. But when that has been said, everything is said. The book does not go deep. Not only is the terminology of the logicians frequently mis-

understood, but their thought is continually caricatured by being superficially interpreted. Dr. Mercier is often attacking a man of straw, a doctrine which is taught by no modern logician in the crude and crystallised form in which he states it. His attack is directed, indeed, against the idea of logic gained in an elementary class; and yet it does not proceed from the point of view of the deeper insight which one afterwards gains, but from a far more superficial and mechanical point of view. In one or two cases, it is true, Dr. Mercier's criticisms coincide with those of the modern logicians whom he does not understand, though they are less accurately expressed; but in the large majority of cases they are very much less profound and betray very much less of real insight.

The scale on which the work is written is no less ambitious than its title. It is divided into four books. The first books deal with the proposition, and—roughly speaking—the remaining books deal respectively with the three different methods of reasoning, which the author distinguishes, *viz.*, empirical reasoning, inference, and analogy.

The very first sentence of Book I takes us by surprise, and is typical of much that follows. The subject-matter of logic is taken to be, not the judgment, but the proposition; and the proposition is defined as "the verbal expression of the formulation or establishment of a mental relation." Again, on p. 28, we read: "A proposition is a verbal relation." This is the deliberate standpoint taken up throughout, and accounts for many strange things. The distinction between verbal and real propositions is next held up to ridicule, but Dr. Mercier's criticisms are entirely dependent on his apparent unfamiliarity with the accepted definitions of these terms. The correct definition of course is: "S is P" is analytic or verbal, when P is the definition, or part of the definition, of S, and synthetic or "real," when P is not part of the definition of S. When this is realised, all Dr. Mercier's criticisms fall away. In the pages which follow the discussion constantly fails to touch the deeper questions of logical theory, though it as constantly leads up to them. We are, at every point, left with distinctions in which no serious student could rest. Externality is distinguished from reality, and the matter is left there (p. 23). The distinction between validity and truth is allowed to remain quite unrelieved (p. 29). Again—to select one more example at random—at a later stage (p. 249), the question is raised whether the laws of thought are laws in the sense of observed uniformities or in the sense of mandates. They can hardly, it is urged, be both. But, though the distinction between factual and normative law is useful, the two senses are surely not *ultimately* distinct. In both cases alike the law is *the principle of the orderliness of a system*; and it does not matter whether that orderliness is an accomplished fact (as in the system of nature) or not (as in the system of human conduct).

The complaint is made throughout that "logicians have always been possessed by a passion to exclude from the realm of logic as much as they possibly could." But Dr. Mercier does not see *why* they have done this. They exclude many forms of proposition and of argument, many classifications, distinctions, etc., because these are of no special scientific interest. Dr. Mercier does his best to include these, and many

of his additional classifications and distinctions are just and true. But they are such as can very easily be made, and as one has very little interest in making. They are of very inferior importance, as far as the theory of logic is concerned. Thus the reason why the singular term is neglected by many logicians is not that they think "there can be no reasoning about individual things" (p. 131), but that no *special* logical interest attaches to such reasoning since it is essentially the same as reasoning about universals. Again, on p. 35 Dr. Mercier complains that logic does not make use of all the differences of modality. The reason, of course, is that modal propositions are so vague that, however practically useful they may be, they can be of little theoretic interest. Dr. Mercier does not seem to see this, and his own discussion throws little light on the subject. "A is necessarily B," for instance, is left standing, without any attempt to determine what the word "necessarily" implies. Nothing could be a better example of the superficiality of the discussion than the way in which hypotheticals are made to be a special form of the modal proposition of possibility. Let me summarise the argument. "A is in some circumstances B" is modal, and therefore logicians say it is extra-logical. If we change it into the form "A is in *these* circumstances B," it is surely no less modal (*i.e.*, qualified or *cum modo*). But this latter can easily be expressed thus: "A, whenever it is C (or whenever C is D) is B." This again can be written as: "If A is C, it is B" (or if C is D, A is B). And this is the ordinary hypothetical, which the logicians receive with open arms! But the answer to this charge is surely simple enough. The whole case lies in the transition from "in some circumstances" to "in these circumstances." The former is a statement of vague, undetermined possibility¹; the latter is a statement of full assertoric certainty, which might be expressed "Ac is B," and which is therefore logically of exactly the same type as "A is B" (the only difference is that the subject is narrower, *e.g.*, it might be "ships without rudders" instead of "ships"). So logicians recognise that the hypothetical is not ultimately a new form. "If C is D, A is B" can always be expressed categorically—more clumsily as far as English style is concerned, but more clearly as far as reasoning is; *e.g.*, "If it is good weather, I will be there," equals "Good weather is a sign of my being there." But Dr. Mercier here again leaves us with an absolute distinction, without attempting to get at the common root of the two forms, though this latter is the only point either of real interest or of real difficulty. And the connection of the whole matter with modality seems the merest elementary error.

A central doctrine of the first book is naturally that of the analysis of the proposition (Book I, Chap. III). The discussion is headed by a statement which is far from promising. "Every relation must contain three elements. It must contain two related terms, and must contain also the link that relates them." It is surely evident to the slightest reflection that a relation does not contain the two terms *and also* the relating link. The link is nothing apart from, or outside of, the terms, and is nothing that can be reckoned alongside of them as a third thing. The disastrous effect of this erroneous start is seen in

¹ *I.e.*, if even this form can be taken as a true modal proposition—which is more than questionable.

what follows. Dr. Mercier's doctrine is, that the proposition is to be divided, not into subject and predicate, but into subject, ratio (*cf.* copula), and object. The example given is: A—is unequal to—B. But—though this example is somewhat special, since we might almost exchange A and B—surely here *only one thing* is said about the subject A, *viz.*, that it is “unequal to B.” “Unequal to B” is, therefore, an indivisible expression for logical purposes. The only natural division of the proposition is into the subject and what is said about it. In most examples this is abundantly clear, as in “This book is red.” The “is” is here *not* an additional thought-element, but simply the sign of the fact that we connect “this book” and “red.” We might represent it diagrammatically, thus: \widetilde{XY} or (XY) . The copula really stands for the fact that we are forming a proposition. “Proposition: XY” really expresses all we mean. Right through the chapter on the ratio, however, it is assumed that the “ratio” expresses a definite relation, and it is contended that there are many such relations, *e.g.*, likeness and unlikeness, action, passion, and causation. But if the copula is merely a sign that we are saying something about something else, surely it is general enough to include all relations. When we say “Tom is like Harry,” we do not attribute Harry to Tom in a certain relation, but we attribute “likeness to Harry” to Tom. And so the relation of attribution naturally covers all the other relations mentioned by Dr. Mercier.

We have dealt with Book I at length because much of what follows is conditioned by the doctrines there set forth. But one or two points must be selected from the remaining books. The central attack is directed against the syllogism. It is said to be an unnatural and unimportant form of reasoning, and only a small proportion of arguments can even be distorted so as to conform to it. Its canons are not true. “It cannot be applied without the knowledge of barbarous mnemonic verses” (p. 411)! Dr. Mercier gives many examples of arguments, which, he says, cannot without unnatural violence be distorted into syllogisms. It seems to me, however, that the large majority of those he gives can very easily be put into syllogistic form, and that when so put they obviously express more accurately what we mean by them. This is true, for instance, of the arguments given on p. 133. As for the rest, they are sufficiently covered by the distinction now recognised by most writers between subsumptive and constructive inferences. Dr. Mercier's own view of deductive inference is as follows: He regards the premisses as together forming a compound proposition, *e.g.*, “All men are mortal and Socrates is a man.” The conclusion states part of the truth contained in this proposition (*e.g.*, Socrates is mortal). Therefore logicians are wrong in saying that the conclusion contains, or enables us to proceed to, anything not contained in the premisses. But what logician ever said that the conclusion contained anything not contained in both premisses *taken together*? It is a law of the syllogism that it *must not* do so. The point is that the *bringing together* of the two propositions gives us something that is not contained in either taken separately. And this is completely obscured by regarding the premisses as forming a compound proposi-

tion. The whole thing is done when the two premisses are brought together. And the conclusion is hardly a *further step*; it is at most "an intuition following on a construction," as Mr. Bradley says. The premisses are not in any sense "a compound proposition" until it is seen that the conclusion can be drawn from them, for until then nobody thinks of placing them side by side.

The only other point that we can deal with is the central one of the relations of deduction and induction. On p. 203 *f* various differences between "syllogising" and induction are enumerated. Their wholly artificial nature may be guessed from the first, which is this: The syllogism has three terms, the induction has four. But the main difference is one which affects the whole book very largely, *viz.*, that whereas deduction is taken as a mere logic of consistency, having no reference to experience, and unable to guarantee the truth of its premisses, induction always contains an appeal to experience. The former is *argumentum ex postulato*, the latter *argumentum in materiâ*. The former is reasoning from hypothesis—any hypothesis, true or untrue, serves equally well; the latter is reasoning from observed facts. But surely this distinction is only half thought out. The significant distinction is *exactly the reverse*. In mere deduction we are arguing—or ought to be arguing—from *known truths* (e.g., as in geometry); in induction we are arguing from *hypotheses*, which have yet to be verified. And that—the precise opposite of Dr. Mercier's—is the only significant difference between the two processes.

But the end is not yet. For if that is the only difference, the two processes are not ultimately distinct at all. Dr. Mercier criticises the schoolmen for treating only one of his three modes of reasoning, *viz.*, deduction (p. 191 *f*). Deduction and induction, we read, "despite a superficial and deceptive similarity, are profoundly different." Now, it is certainly important, and it is also very easy, to see the difference between the two processes, but it is infinitely more important, and it requires very much deeper insight, to discern their fundamental unity. All intelligence is ultimately one, and there is *ultimately* only one mode of reasoning—the deductive. The only complete inductive method is the "deductive" or "hypothetico-deductive" method. The only difference between deduction and induction is that in the one case we know the truth of the general laws and deduce the particulars from them, whereas in the other case we prove the truth of the general laws (which we meanwhile postulate hypothetically) by showing that the particulars (which we know from observation) can be deduced from them. In both cases we deduce particulars from general laws; the logical operation is the same, but we use it to different purposes. Dr. Mercier's distinctions leave us in chaos, but the perception of the ultimate identity of the two processes throws floods of light on what is the main object of interest for logic—the nature of intelligence.

With reference to the account of induction proper (mediate induction), I can only say that the canons given, though they might not bring us out far wrong in practice, are again skilfully constructed so as to obscure the only vital point of interest—the real nature of the process. One good point, however, is made. The function of induction is to solve problems, and all problems are not problems of causation, as most

logicians seem to assume. There are, for instance, historical problems of identity, which have nothing to do with causation, and are nevertheless excellent illustrations of inductive method. This seems very just.

Dr. Mercier's book is often a fair enough account of how ordinary men think, and therefore may contain useful prolegomena to the study of morbid reasoning. But even at that, it rather reflects their forms of expression than the real nature of their thought-transitions. And the book contains very little that is a serious contribution to the main aim of logical study, *viz.*, the fundamental nature of intelligence, especially of the normal scientific intelligence. Dr. Mercier must try to understand modern logic. There does not seem to be any more royal road to the goal he wishes to reach.

JOHN BAILLIE.

Part III.—Epitome.

Progress of Psychiatry in 1911.

AMERICA.

By Dr. WILLIAM McDONALD, Jun.

A distinguished Dutch neurologist, crossing the ocean recently, was asked to state the object of his visit to America. "I am bent on study," he answered. "I wish to study nervous diseases among the most nervous people on earth." Waiving the fact that nervousness and mental disease in America are to an overwhelming degree found among the foreign born element, and cannot, therefore, be truly attributed to American environment and influences, the allegation that America is a ripe field for the study of nervous disease must be acknowledged. Everywhere throughout the country attention is being called to the alarming increase in insanity in the past decade. Without doubt such disturbing reports take far too little count of the effect upon statistics of the wonderful advance in later times in accuracy of recognition and registration of insanity, and of the constantly increasing tendency to house, restrain and treat the subjects of mental disease.

Only one who studies closely from year to year the reports of hospitals for the insane, the acts of legislature and the appropriations for the care of the insane in the various States of the Union can form any adequate notion of the tremendous amount of energy that nowadays is being expended to check the march of insanity. Pessimists see only increasing degeneracy and decay; the genuine student can be nothing if not an optimist, and he who fails to see an improvement in the average of human mentality—even of American mentality—is reading the records through short-sighted glasses.

A year is too short a period of time in which to judge of the direction of the slow current of events, and even a decade must be observed in perspective, in a clear atmosphere and with unjaundiced eye, if its course is to be correctly charted. As in previous years, there are the same old waves

of psychiatric study, the laboratory reports, the literature of individual effort, the ripples of society proceedings, the churning of legislative revolutions, and the wake of judicial evolutions. But for the year that is gone the log is exceptionally interesting and contains many entries of landmarks passed.

Public opinion regarding the nature of insanity, its causes, prevalence, prevention and treatment is surely undergoing a great change, and undeniably the tendency is toward truth. The psychiatric profession is at last coming into its own, and is everywhere in the lead in shaping the course of general thought and activity as to the problems of mental health. It is not possible to particularise to any considerable extent concerning the work of the year, but one example may be given in some detail to illustrate the far-reaching character of the present agitation. The *New York State Hospitals Bulletin* for April, 1912, is a "Special Immigration Number," and the summary on page 35 of this valuable report is so full of information and so startling in its disclosures as to warrant reproduction in entirety in this place :

"From the foregoing study the following conclusions may be drawn :

"(1) The number of foreign born insane in the State hospitals is steadily increasing.

"(2) The foreign born population of the State contributes relatively a much larger number of patients to the State hospitals than the native born.

"(3) The nationality of the foreign born patient population of the State hospitals is gradually changing. The proportion of Irish and Germans is diminishing, and the proportion of Austrians, Hungarians, Italians and Russians is increasing.

"(4) Although the rate of insanity among the Italians is low, this nationality contributes an unusually large proportion of patients to the State hospitals for the criminal insane.

"(5) The number of female patients in the civil State hospitals exceeds the male, both among the native born and the foreign born ; the male patients, on the other hand, greatly exceed the female in the hospitals for the criminal insane.

"(6) The average total hospital residence of the foreign born insane patients is 9.85 years.

"(7) The hospital life of the females is longer than that of the males.

"(8) There was a relative as well as absolute increase in the number of foreign born first admissions in 1911.

"(9) The first admissions of 1911 show a rate of insanity 2.19 times as great among the foreign born population of the State as among the native born.

"(10) The percentage of foreign born among first admissions from New York City is much higher than among those from other parts of the State.

"(11) The rate of insanity among the foreign born of New York City is 2.48 times that of the native born.

"(12) About one-fifth of the foreign born first admissions of 1911, entered a State hospital before having been in the State five years.

"(13) The larger part of the immigrants who are admitted to a State hospital within five years after landing come from Austria-Hungary, Italy and Russia.

"(14) The foreign born first admissions show a higher rate of illiteracy than the native born.

"(15) The largest percentages of foreign born illiterates are found among the Austrians, Russians and Italians.

"(16) The average age of the foreign born first admissions is practically equal to that of the native born.

"(17) The first admissions born in Austria, Italy and Russia, average younger than those born in Germany and Ireland.

"(18) There is a general correspondence among the native born patients and the foreign born patients with respect to the various forms of mental disease.

"(19) There is a high rate of paresis among patients coming from Scotland, Canada, Hungary and Bohemia and France.

"(20) There is a high rate of alcoholic insanity among patients coming from Ireland, Great Britain, Canada and Scandinavia.

"(21) Cases of general paresis and of alcoholic insanity are relatively more frequent among the foreign born than among the native born population.

"(22) Much the larger part of the insane now entering the hospitals are residents of cities.

"(23) A larger proportion of the foreign born insane are residents of cities than of the native born.

"(24) The proportion of foreign born patients among re-admissions is less than among first admissions."

After reading the above our British colleagues will not be surprised to learn that the problem of immigration regulation and restriction is one of the great questions of the hour for America. And the question is not easily answered.

On October 26th, 1909, a certain Yittel Goldfarb, sixteen years of age, came to the United States from Russia with her mother, who arrived with four other children. They came to meet the father and husband, who had come to America some five years earlier. In 1911 Yittel became insane, and Dr. Thomas W. Salmon, of the New York Board of Alienists, stated that the cause or causes responsible for her condition were "constitutional psychopathic tendencies and mental instability," and that these existed prior to her landing in this country. Deportation was recommended because the law requires that an alien who within three years after landing shall be found a public charge from causes existing prior to landing shall be deported. With the case of Yittel Goldfarb as a basis, an opinion was asked from the Solicitor of the Department of Commerce and Labour as to the authority of the Secretary of Commerce and Labour to deport certain alien public charges. The Solicitor, after reading the medical records of the patient, took issue with the medical opinion, and decided that "the statement that the alien's insanity is caused by 'constitutional psychopathic tendencies or mental instability' or other 'predisposing causes' existing prior to landing is given in the form of a bald medical opinion or conclusion, unaccompanied by any facts or reasons showing on what it is based." "That there is not an affirmative fact in the record, including the family history and the hospital history of the alien, tending to show either that the alien exhibited constitutional psychopathic tendencies and

mental instability at the time of landing or prior thereto, or that such constitutional psychopathic tendencies, or mental instability, or other predisposing causes likely to lead to insanity, could by any known means have been detected at that time." "That in view of the wholly negative aspect of the evidence, it must be assumed that the medical opinion concerning the underlying cause of insanity and the prior existence thereof is wholly *ex post facto*, because the alien has become insane the alien was a person of constitutional psychopathic tendencies and mental instability; and because the alien was such a person when insanity developed the alien was such a person at all prior times." "That in many cases, as in this, some circumstances or event in the life of the alien since landing affirmatively appears from the evidence, suggesting to the ordinary mind an adequate cause to account for present insanity, independently of any constitutional psychopathic tendencies or mental instability on the part of the individual, *e.g.*, as the account in the present case of a sexual assault upon an ignorant sixteen-year-old girl in her own home, and the ensuing shame and worry on her part." In short, the Solicitor finds that the medical opinion is an absurd application of the metaphysical rule (the cause of the thing causing is the cause of the thing caused), and does not warrant the application of the process of deportation. Moreover, that the mere dictum or opinion of a medical officer is insufficient ground both in law and reason for authority on which the Secretary might order deportation. The Attorney-General of the United States concurred entirely in the above opinion. This decision has been published by the Department of Commerce and Labour and generally distributed to immigration officials and others, and promptly afforded grounds for refusal to deport in cases in which it had been certified by the New York State Board of Alienists that certain insane aliens were a public charge from causes existing prior to landing. It also provoked from Dr. Salmon, of the State Board, a response and defence in the form of an extremely lucid and interesting letter to the Secretary of Commerce and Labour. The letter would bear complete transcription did space permit. The gist of it may be deduced from the following quotations: "Some mental diseases, like manic-depressive insanity, depend almost wholly upon constitutional psychopathic tendencies, and others, like general paresis, depend almost wholly upon previous infection with a specific organism. In preparing certificates in the case of aliens deportable under the federal immigration law, no cases are certified to be due to constitutional psychopathic tendencies and mental instability unless the form of the disease from which they are suffering is known to depend upon such causes. Infective and exhaustive psychoses following acute infectious diseases are known to be the result of the effects upon the brain of toxins elaborated during the infectious disease, of high temperature and of exhaustion, and if the infectious disease occurred after the alien's arrival in the United States it would be freely admitted that the existence of prior cause could not be established and no steps would be taken toward deportation. But this conclusion would be reached by considering the nature of the mental disease as shown by the records and by examination of the patient, and by considering the causes ascribed to it by the best teaching of modern psychiatry. In manic-depressive insanity, the mental

disease from which the alien in question in 'Decision No. 120' was suffering, it is known that the cause is constitutional predisposition to the disease. As de Fursac says, 'One thing is certain: manic-depressive insanity is a disease of the degenerate.' Everything, especially the tremendous influence of heredity, points to the deep-seated constitutional nature of the disease." Dr. Salmon declares that the State of New York, which already cares for eight thousand aliens, will care for many more of a class which, under another interpretation of the same law, furnished about three hundred and fifty deportations a year.

An important undertaking has been launched by the American Medico-Psychological Association in the appointment of a committee whose task is the preparation of a history of institutional care of the insane in the United States and Canada. The fact that Dr. Henry M. Hurd, of Baltimore, is chairman of that committee gives promise that the work will be satisfactorily performed. The aim is to present a detailed record of the early beginning, and later of the wide-spread and comparatively rapid movement between the fourth and sixth decades of the nineteenth century, which finally resulted in State care for the insane in all parts of the United States and Canada. The record will include biographical sketches, and a tribute to the philanthropic men and women who roused the public conscience to action at a time when the insane were greatly neglected. There will be chapters on legislation, jurisprudence, architectural arrangements of institutions, training schools, etc. In brief, there is not any phase of institutional care which will be omitted from this forthcoming work.

The Boston Psychopathic Hospital now under construction represents another step forward in psychiatric work, and its establishment illustrates once more the remarkable change in the attitude of the State and public toward the mentally deranged. It has been exceedingly difficult to convince the laity that institutional care might, or even could, be afforded to insane patients save through the offices of the police courts or by public commitment. But gradually the conviction is taking root that mental illness should no more deprive a patient from voluntarily and privately seeking the advantages of a hospital than does a mere physical illness such as appendicitis, and this new hospital will receive without formality or delay, directly from their homes, from the streets, from the police, from every source in the community, any and all mental cases from the city of Boston and the metropolitan district. Many of these will, after preliminary treatment, and the required observation and study, be committed to the Boston State Hospital, or to other State hospitals, but a fair proportion will be treated until they recover and returned to their homes directly from the Psychopathic Hospital which is designed to serve the community in its special sphere as a general hospital does—freely, with dispatch, and in accordance with varying needs as they arise.

In the courts during the past year many cases with important medico-legal bearings have been tried, not the least dramatic of which has been that of the young preacher, Richeson, but lately electrocuted for murder. The limit of space having been reached, no more can be said than that in these legal affairs, psychiatrists have acquitted themselves with more than the usual degree of credit and dignity, and have received more

than the ordinary measure of respect and consideration at the hands of the court. It may be concluded therefore that recent agitation concerning evil medico-legal practices has resulted favourably.

In conclusion, the saddest paragraph must be written—that which refers to the death of Dr. George Frederick Jelly. On October 24th, 1911, we lost one of the most competent, as well as most beloved, psychiatrists America has known. He remained at work almost to the day of his death, and rounded out a career crowded full of goodness and wisdom.

FRANCE.

By RENÉ SEMELAIGNE.

IN a Paris restaurant on January 2nd, 1911, an alcoholic shot and killed, without provocation, a peaceful diner. Dr. Vallon, the medical expert, concluded that the accused, who had a family history of insanity, was a congenital *déséquilibré*, a chronic inebriate addicted to alcohol and ether; that the murder had been committed in a state of intoxication, and had been forgotten by the prisoner; that he was not insane, and was criminally responsible; that, nevertheless, in consideration of his hereditary and acquired predisposition he might be considered as having been in a state of pathological inebriation at the time when the act alleged against him was committed; and that in consequence his responsibility was modified. The trial took place on August 3rd, and the accused was acquitted and discharged; but the members of the jury in a letter to the *Ministre de la Justice* represented that criminals acquitted as irresponsible, remained a danger to the public safety, and earnestly requested that the competent authority should send such persons to custody in a specially constituted establishment, to be detained until it should be duly certified that they were no longer dangerous.

Dr. Vallon considers that it is a public danger to discharge unconditionally an habitual drunkard who has committed a crime in a state of drunkenness, and that the best protection would be the erection of an *asile de sûreté*, to which any drunkard charged with a crime or minor offence should be committed for care and treatment, his detention being ordered by the competent legal authority.

A special institution of this nature seems to have been in existence before the Revolution, and Dr. Sérieux recently published, as a contribution to his inquiry into the *asiles de sûreté*, a very interesting study of the Bastille and its prisoners.

In historical works, in political studies and in fiction, the Bastille is only described as a representative institution of the old monarchy, with its abuses and errors, and the *lettres de cachet* have been regarded as crimes against the liberty of the subject. But the archives of the Bastille, scattered at the time of the Revolution, have been re-collected, and a more careful study of all the papers, of the letters of *lieutenants de police* and of the officers of the fortress, with an attentive perusal of the letters written by the prisoners, has succeeded in shaking the legend. When

the Bastille was seized, on July 14th, 1789, by the revolutionists, only seven prisoners were found detained in the old gaol: four forgers, two lunatics and a dangerous degenerate.

The histories of five thousand of its prisoners are known, and it is evident that the Bastille was mainly employed as an *asile de sûreté*, where could be detained persons of rank and influence who were suffering from mental disorders which appeared to be curable. Such confinement was not degrading and was preferred to detention in an asylum for the insane. Most generally, where the insanity was chronic, patients not dangerous were discharged and sent back to their families, or were transferred to special establishments.

That the Bastille was also an asylum for unmanageable lunatics is proved by the transfer to that fortress from prisons and other asylums of persons suffering from psychical illnesses or defects, who were especially dangerous or difficult to control, or who had succeeded in escaping from detention.

Now and then the superior of some monastery in Paris or in the country made request for the transfer to the Bastille of a patient who had been committed to his custody, and who was "agitated as a devil." But most generally the mental disorder of the patients imprisoned in the fortress was not understood, and they were incarcerated for some other reason, so that many prisoners confined under charges of sexual offences, intrigue, imposture, villainy, conspiracy, espionage, exhibited after a few months of observation the signs of genuine mental disorders.

In the reports kept on the prisoners one might find all the events which occur in an asylum for the insane, such as attempts at suicide and escape, attacks on attendants, fits of excitement, uncontrollable agitation, acute excitement, destructiveness, periods of mutism, self-accusation, refusal of food, acts of mischief and of planned rebellion, delusions of poisoning, delusions of conspiracy, etc. Even the detailed observations concerning the prisoners, recorded by the officers of the Bastille, recall to mind the notes made in an asylum for the insane, for the frequent occurrences of mental disorders among the prisoners rendered the members of the staff familiar with the various forms of insanity.

In addition to cases of undoubted insanity, there were a great number of anti-social degenerates, or persons who could not adapt themselves to any form of society, and whose mental condition was not secondary to disease, but an abnormality of psychical evolution. The notes on such cases contain the terms "libertine," "rascal," "mischievous," "foolish impostor," "scoundrel of the highest order." Amongst them the alienist can easily identify various classes of degeneracy, such as perverse debility, hysteria, moral insanity, disequilibrium, mysticism, fanaticism, regicidism, sexual perversion, intellectual insanity, false interpretation, elation, mythomania, etc. Just as now, such constitutionally abnormal people were a social annoyance, and it seemed necessary to protect the public safety. Accordingly the constitutional abnormals and the mischievous *psychopaths*, who could not easily be reached by legal interference, were committed to the Bastille by royal authority.

General abnormals were numerous, and one might observe inversion,

sadisme, exhibitionism, etc. The prisoners registered as adventurers and impostors used to come to Paris from different parts of France and Europe in order to find their easy dupes. Amongst them were many *deséquilibrés*, vagabonds, and some that could be catalogued as cases of disorders of interpretation, elation of fabulation, of imagination, etc.

Dr. Sérieux records a great number of observations, and states that the famous prison was in reality the *asile de sûreté* demanded by criminologists and alienists of the twentieth century. If such a conception seems at first to be paradoxical, the fault lies with the pamphleteers, politicians and historians, who with unusual unanimity and during more than a century have misled public opinion.

Historical records prove that the victims of religious persecution or of private vengeance constituted but a small minority of the prisoners of the Bastille.

During several generations sensitive spirits have pitied the fate of vulgar criminals, rascals and sharpers, sodomists and regicides, mischievous degenerates, moral imbeciles and criminal lunatics. For about two centuries the Bastille served the purpose of social defence and protection; any person imperilling the security of the State or of private individuals was detained under lock and key.

At that time an exact division had not been made between prisons and hospitals, and prisoners were sent to Bicêtre and to the Salpêtrière as well as lunatics to the Bastille. To sum up, the Bastille was a prison for anti-social degenerates, and the greater part of the pretended victims of despotism were malefactors, lunatics or dangerous abnormals.

With regard to the *lettres de cachet*, if we exclude religious and political interests it is easy to demonstrate that our modern government has maintained, without any essential modification, these measures of the old monarchy, but under a different name.

There is no great difference between the detention in an asylum by a decision of the *préfet de police*, not only of lunatics, but also of abnormals, and the incarceration of the same people in the Bastille by a *lettre de cachet* of the *lieutenant de police*, the object of both decisions being to protect society against certain individuals who might be dangerous, or might disturb public peace and tranquility.

Do we not find the same analogy in the precautions taken to prevent arbitrary detentions? The periodic visitation of prisoners by the *lieutenant de police* seems to be identical with the visits of *procureur de la République*, paid in accordance with the Lunacy Law. As to the *lettres de cachet*, which were obtained upon a petition presented by parents or relatives, they were similar to our *placements volontaires*. Such petition necessarily contained an allegation or statement of particulars, and the order for detention could not be obtained without a long and circumstantial inquiry made by the commissary and the inspector of police, each of them separately, and their reports included evidence founded on an examination of the accused, of his relatives and neighbours, and of the vicar of the parish. It was only after the reception of such a report that an order could be made by the board presided over by the *lieutenant de police*, or in the Royal Council, and in the presence of the King. On the other hand the prisoners were at once discharged even unrecovered, as soon as the family presented a request. Conse-

quently the *lettres de cachet*, the State prisons and the Bastille have been of the utmost service to society at a time when no well-organised system existed of provision for the insane or of prevention of crime.

Dr. Sérieux observes that the present provision for the insane and the system of penitentiaries mark a new era.

During the seventeenth and eighteenth centuries State prisons received all the anti-social elements without any distinction ; now, on the contrary, there is a tendency to a more exact differentiation. The object aimed at is to substitute for the old method of arranging the classes of the insane in the different wards of the same asylum a more appropriate distribution in different asylums, each one devoted to a particular form of insanity and with an organisation carefully adapted to its special methods. So one looks for hospitals for acute mental diseases, colonies for chronic and convalescent insane, refuges for incurable invalids, separate asylums for the treatment of habitual drunkards, colonies for epileptics, institutions for the treatment and education of mentally defective children, sanatoriums for borderland cases, family colonies for the harmless insane, etc., and especially a separate asylum seems to be required for the various categories of pervers included under the heading of "criminal lunatics."

Dr. Sérieux divides dangerous psychopaths into three categories, requiring three different kinds of establishments.

(1) Convicts becoming of unsound mind while in custody. He requires for these the formation of large separate wards annexed to prisons in the neighbourhood of Universities.

(2) Dangerous and unmanageable lunatics, such category including all lunatics who, before or after their incarceration, have committed a criminal offence, the aggressive delirious insane, the dangerous alcoholics, etc. ; these patients to be detained in separate wards annexed to an asylum.

(3) Congenital abnormals, who, in consideration of their modified responsibility and lucidity of mind, might avoid the prisons as well as the asylums. The mental state of this class is characterised by psychical disequilibrium, intellectual defect, perverse instincts, wickedness, constitutional excitability, and attacks of delirium or of dangerous impulsiveness under the influence of the least alcoholic excess. Unable to live without control, they constitute a permanent social danger. If they happen to be detained for a time in a penitentiary, they are soon discharged, for they have been sentenced to a brief term of imprisonment in consideration of their modified responsibility. If placed in a lunatic asylum they soon become intolerable and a source of annoyance to the other patients ; also they are not acutely excited and easily obtain their discharge. The true place for people of this class is not a hospital appropriated to the treatment of psychoses, but an *asile de sûreté*. While the newspapers, concludes Dr. Sérieux, are demanding every day the capture of some Bastille, we implore the erection of new ones.

GERMANY.

By Dr. JOHANNES BRESLER.

The most important event in the department of psychiatry in Germany since my report in 1910 has been the Fourth International Congress for the Care of the Insane, which was held at the house of the Prussian Deputies in Berlin, from October 3rd till the 7th, 1910. The Congress was attended by about six hundred members. It compared favourably with its predecessors in the number and practical and scientific importance of the reports and in its general arrangements; it was evident that the interest of psychiatrists and of laymen in those congresses is on the increase. In addition to the meetings of the members, there was an important exhibition of models, plans and photographs of establishments and institutions for the insane, of sick-rooms and of machinery, of work done by patients in public and private institutions, and of scientific apparatus and books, which was visited with great interest, and which gave a very true idea of the progress in Germany in the care of the insane. The exhibition had been arranged by Dr. Alt, at Uchtspringe (Altmark). A no less true insight into German methods is given by a work on German Hospitals, which was edited by Dr. Bresler. A copy of this work was presented as a souvenir to each member of the Congress. It was edited with the assistance of the superintendents of the public and private asylums, and contains in an elegant volume of 666 pages the description of about seventy institutions for the insane, illustrated with numerous plans and photographs. This work has since been continued, and a second volume of 465 pages, with illustrations, has recently appeared. At the same time a similar work has been edited by Dr. Schloess, of Vienna, on Austrian asylums for the insane, copies of which (and of the second volume of the above-mentioned work) were also presented to the members of the Berlin Congress. So that it may be truly said that seldom have members returned from a congress with so abundant a supply of literature. A special number of my *Weekly Journal of Psychiatry and Neurology* was devoted to the members of the Congress, and contained about fifty portraits with short biographical sketches of the most distinguished alienists present. The more important papers are perhaps worthy of mention in this retrospect.

The most important was that contributed by the universally revered Tamburini (Rome) on the connection between insanity and civilisation. Some of Tamburini's conclusions are as follows: It is not correct to assert that insanity was once less common than it is now, for nowadays mental diseases attack single individuals, whereas in former centuries whole masses of people were involved in psychical epidemics. In less civilised and savage nations certain psychical disorders are still of frequent occurrence which have long since disappeared from civilised countries. Whether, in the latter, the large number of insane admitted into institutions is evidence of an increase of mental disorder still remains an undecided question, for the limited statistics which exist extend only to a few decennial periods, and so important a question cannot be decided by the consideration of so brief a period. On the

other hand, the greatest importance must be given to the fact that in the present age mental derangements are more quickly recognised and are better understood, and civilisation must be regarded as a factor in the rapid diagnosis rather than in the causation of insanity. Moreover, to-day we treat as insane conditions which were not formerly so regarded. The present complications of industry and commerce, the excellence of modern institutions and the increased care devoted to the insane have resulted in more patients being confined to these establishments than formerly. Also statistics have become more exact. Civilisation *per se* effects no increase in mental diseases. On the contrary there are factors of the highest importance in the causation of insanity which can be, and are, combated with success by civilisation, namely alcohol and syphilis. If the success of the battle against these foes is still incomplete, it only proves that civilisation has not yet progressed far enough.

Less optimistic were the conclusions arrived at by another speaker, Rüdin (Munich), who believes that in our civilised nations there is a marked tendency to bodily degeneration, and that sooner or later this must bring with it a diminution of nervous energy and a disruption of the fundamental basis of our civilisation.

Blin and Vigouroux (Paris) believe that it is not civilisation itself which must be made answerable for the development of psychosis, but the particular kind of civilisation, which, aiming at perfection and the improvement of the conditions of life, leads to physical and mental over-exertion and renders the organism more vulnerable to many toxins.

Hellpach (Karlsruhe) read a paper on "The Psycho-pathology of Modern Art and Literature." Among his interesting reflections was a warning against the supposition that the importance of either is reduced by its association with disease. He states that, on the contrary, development in nature and history often comes by disease, and that sickness is often a path of Nature to manifold great and new attainments; that finally the pathological may be ennobled by the valuable effects which it produces.

Cramer (Göttingen) contributed an article on institutions for the nervous diseases of the poorer classes. Sommer (Gießen) on the conditions of forensic psychiatry.

Much time was devoted to a consideration of the relation of military service and of war to mental diseases. Among those who took part in the discussion were: Deknatel (Alkmaar, Holland), Kay (Bristol), Krause (Berlin), Stier (Berlin), Pactet (Villejuif, near Paris), Apt (Przemysl, Austria), Schultze (Berlin).

From these contributions it was evident that in every country the military authorities endeavour strictly to exclude abnormal individuals from entering the military service, to remove those who, in the service, have become insane or are known to be abnormal, and lastly to place under immediate and efficient care those who have become insane during war.

An excellent article was read by the well-known psychiatrist, Dr. Peeters (Gheel), on the family care of the insane at Gheel and its influence upon the sane population. He proves in detail that there is no question of a noxious influence, but that, on the contrary,

the constant sight of one of the saddest human afflictions and the care of the insane by the members of families have produced a high degree of altruism and of kindly feeling.

Von Olah and Fabinyi read papers on the further development of family care in Hungary. Plaut (Münich), A. Marie and Beaussart (Paris), Hallager (Aarhus) read papers on "The Wassermann Reaction in Mental Disease."

We had also the privilege of hearing the well-known English pathologist Mott, who spoke on his researches on sleeping-sickness; he, Ehrlich and A. Marie contributed detailed and illuminating accounts of the cause, course and pathology of this disease. I will only here refer to the important statement made by Marie, that the form assumed by many cases of sleeping-sickness is very difficult to distinguish from that of dementia præcox. The excellent demonstration of living trypanosomes and spirilla in kinematograph by Marie evoked the enthusiastic applause of the Congress.

Very interesting also were the demonstrations by Alzheimer of degenerative processes in the nervous system. Schloess (Vienna) read a paper on "The Admission of Voluntary Boarders into Institutions for the Insane" and van Deventer (Amsterdam) "On the Treatment of Nervous Diseases." We regret that our space does not permit us to mention the other papers; there were more than sixty in all. We may be allowed to include in this retrospect the official report of the Congress, which is published by C. Marhold, Halle-a-S. President of the Congress was Prof. C. Moeli (Berlin). Honorary Presidents were A. Marie, Régis, van Deventer, Peeters, Bajenoff, Tamburini, Obersteiner, Macpherson, Donkin, Buffet, Moreira, Olah, Nerander. The progress of psychiatry in Germany was, as hitherto, steady and continuous; there have not been any great revolutionising discoveries and innovations. Psycho-analysis still gains adherents; its literature is vastly increasing, but it is not accepted by the official scientific world; and there are phenomena in connection with this method of investigating morbid mental conditions which deter many observers from adopting it.

In the Department of the Histology of Mental Diseases we are indebted to Alzheimer (Munich) for a series of epoch-making researches. Above all, he has elucidated the processes of degeneration in the cortex cerebri in an interesting manner by his discovery of the amœboid glia cells, and by his demonstration of their importance in nerve-cell degeneration, and in removing the products of degeneration. The Möbius prize was accorded to him in recognition of his valuable work. The clinical importance of a work by E. Bleuler (Zurich) is worthy of mention, entitled *Dementia Præcox, or the Group of Schizophrenies*. He does not consider the dementia to be the only characteristic feature of the disease, and presents an interpretation of the symptoms in many respects new and original; he regards the essential condition as a splitting of the different psychical functions and a failure on the part of the organ of reasoning to accommodate itself to the morbidly changed psychical mechanism. On these grounds he explains, in a skilful and convincing manner, his choice of the term "schizophreny" instead of "dementia præcox."

With regard to treatment there is nothing new to report. Salvarsan has achieved no success in the treatment of general paralysis, and has disappointed the hopes placed on it with regard to this disease.

New hypnotics are produced nearly every month, and are for the most part combinations of the old ones. It would serve no useful purpose to enumerate them. Only one seems to be of particular importance, namely, luminal (natrium phenylæthyl barbituricum), made by the firm Bayer & Co., of Elberfeld; the numerous experiments made with it at many asylums have shown that it is a good hypnotic, and can be given without danger in effective doses.

In England, where the term "moral insanity" has been coined, it will be learned with interest that, particularly in Prussia, the greatest attention is being devoted to the care of psychopathic children, who have come under the working of the Compulsory Education Act. At the present time, in the provincial asylums at Goettingen and at Potsdam, wards have been instituted for such children, and careful observation of their mental state, and if necessary treatment, is there carried out. It may also be recorded that in many of the lunatic asylums of Germany the patients on admission, and in some cases even the staff, are submitted to a searching examination with a view to discovering if they are carriers of dysentery or typhoid bacilli. By isolating those patients who are carriers, and by adopting particular precautions and methods of cleanliness towards the sane carriers, it is hoped to radically prevent epidemics of dysentery and typhoid which have recurred again and again in our asylums, or to find out their cause and successfully apply the remedy.

We may record an interesting innovation made in one provincial asylum (Eickelborn, in Westfalen), which has a special ward for dangerous criminal lunatics. In this asylum they have begun to employ watch-dogs, by which the attendants are accompanied when on duty, and which serve to prevent attacks on the attendants and to hinder escapes.

You will not, perhaps, regard this innovation as an advance in the treatment of the insane.

A REVIEW OF THE CONGRESS OF ALIENISTS AND NEUROLOGISTS OF FRENCH-SPEAKING COUNTRIES HELD AT TUNIS, APRIL 1ST TO 7TH, 1912.

By ROBERT JONES, M.D., F.R.C.P.Lond.

From April 1st to the 7th this year the Twenty-second Annual Congress of Alienists and Neurologists of France and of French-speaking countries, consisting of a membership of about 300 adherents, was held in Tunis, and the writer attended as a delegate of the Medico-Psychological Association of Great Britain and Ireland. More than thirty institutions for the care and treatment of mental cases were associated with the Congress, and numerous delegates representing learned societies as well as foreign countries attended. The President of this year's Congress was Dr. Mabilie, Medical Superintendent of the La Fond

Asylum at La Rochelle ; Dr. Arnaud, Physician to the Mental Hospital of Vanves (Seine) was Vice-President ; and the General Secretary was Dr. Porot, the very able and energetic Physician to the French Hospital in Tunis. An important paper announced for discussion was by Dr. Régis, Professor of Clinical Psychiatry in the Faculty of Medicine at the University of Bordeaux, who contributed a very full and exhaustive paper upon the "Care of the Insane in the French Colonies and Dependencies," with a review of their treatment in the adjoining colonies such as those of England and of Holland. Dr. Régis was assisted in his paper by Dr. Reboul, of Annam. Another paper was by Dr. Chavigny, Major of the French Army Medical Service, upon the "Mental and Nervous Symptoms associated with Malaria"—obviously one of considerable importance in view of the expansion of French Colonial Government ; and a third paper by Dr. Dupré, one of the teachers and a Fellow of the University of Paris, was upon mental states arising from, and connected with, perversions of the natural instincts. Although these were the three main subjects, other papers connected with neurology or psychiatry were presented to the Congress for discussion, among them being—one upon "Goitrous Insanity" by Drs. Fraikin and Grenier de Cardenal, one relating to "Insanity and Renal Disease" by Dr. Beriel, one by Dr. Gelma on "Delusions of Persecution." Other papers were by Drs. Petit, Mignot, Adam and Levassort. A valuable report upon an experimental study relating to the association of ideas in the Insane was presented jointly by Dr. Auguste Ley, Professor in the University of Brussels, also physician to the Mental Sanatorium at Fort-Jaco, Uccle, near Brussels, and Dr. Paul Menzerath of the same hospital laboratory. Another paper was by Dr. Levassort upon "Degeneracy in its Relation to Perverted Instincts," and two others bore upon the same subject, *viz.*, one by Dr. Berillon, relating to the influence of suggestion upon normal as contrasted with abnormal instincts, and the other by Dr. Simonin who related his experience in the French Army in regard to mental enfeeblement, a clinical and medico-legal study. A paper by Dr. Haury upon "Hooligans in the Army and their Rational Treatment," formed a suitable complement to the chief paper of the day by Dr. Dupré.

Among those who attended the Congress was Dr. Semelaigne, of Neuilly-sur-Seine, the Permanent Secretary of the Congress, well known in England and America for his contributions to psychiatry, and also for his most interesting volume of the early history of the insane, recording the works of Pinel and Tuke—a volume which every psychiatrist should read, and which has just been published by Steinheil, of Paris ; Dr. Antheaume, Chief Physician to the Mental Sanatorium at Rueil, near Paris ; Professor Gilbert Ballet, of the Faculty of Medicine in Paris, and one of the Physicians to the Ste. Anne Asylum ; Drs. Croustel, of the Lesvellee Asylum, Vannes ; Andrieu, of Agen ; Charnel, of Chalons-sur-Marne ; Hercouët, of Ste. Mandé (Seine) ; Manheimer Gommès, of Arago ; Vallon, Assistant Physician to the Ste. Anne Asylum, Paris ; Ammeline, of Dun-sur-Auron ; Mercier, of Alençon, Orne ; Jean Abadie, Professor of Psychiatry at Bordeaux, who reported the proceedings in *La Presse Médicale* to which I am greatly indebted ; Famenne, of Florenville, Belgium ; Daday,

of Privas ; Jacquin, of St. Madelaine, Bourg ; Simonin, Professor of Medicine at the Val-de-Grace, Paris ; Vigouroux (Vaucluse) ; Beriel, of Lyons ; Lacronique, of Tunis ; Clerfayt and Maere, the delegates of the Belgian Government.

The Congress meets once a year in some town in France, or one of the countries where French is spoken. Last year the Congress met at Amiens, and a number of the Congressionists journeyed to London, and, at the invitation of the London County Council, visited the Laboratory and the Asylum of the Council at Claybury, where they were received by Sir John McDougall and the Chairman, Mr. T. Chapman, being shown over the two departments by Dr. Mott and Dr. Robert Jones.

The aim of the Congress is the study and discussion of some questions connected with psychiatry, neurology and forensic medicine relating to the insane, and the French language is obligatory at the discussions. The duration of the Congress is a minimum of four days, which, so far as possible, must be consecutive, and there are two meetings each day, one in the morning at nine o'clock, and the other in the afternoon. It is customary to make some visits to asylums for the insane in the immediate neighbourhood of the town or city fixed for the Congress, and this helps members to keep in touch with each other, and to kindle a spirit of emulation in the evolution of administration, and of course there are the usual excursions to places of interest.

Apart from the attractions of the Congress the prospect of again meeting those of my French fellow-workers who had visited Claybury, of seeing their Institutions for the special care and treatment of the insane, especially the one in a new colony, and of discussing points of diagnosis, nomenclature and treatment, was an allurements which implied entertainment as well as instruction ; add to this the anticipated pleasure of travelling through France from north to south, particularly of making a transit from Europe into Africa across a sunny and rippleless Mediterranean of azure blue—which, alas, was not realised—together with the charms of seeing new people, and of experiencing the fringe of the desert, and above all of witnessing the outburst of bud and bloom, the “ vernal impulse ” after the dreary chill of a London winter, all these made the prospect of a visit to Tunis an exciting as well as an exhilarating holiday.

Members of the Congress steamed from Marseilles on Friday afternoon, March 30th. We were received on board the “ Eugene Pareire,” of the Compagnie Generale Trans-Atlantique, by the President of the Congress, Dr. Mabile, also by Dr. E. Régis and others, and we settled down to what we hoped was to be a thirty-six hours’ pleasurable crossing of the blue Mediterranean. Such was far from being the case, however, and the party—rather bedraggled—arrived in Tunis early on Sunday morning, March 31st, Palm Sunday, being greeted by Arabs, Moors, and a mixed assemblage of swarthy but respectful searchers for your “ bag and baggage.”

The Congress opened at ten o'clock in the morning at the Palace of the French Societies, in brilliantly beautiful weather, the sun and sky being seen as they never are seen in Europe.

The opening ceremony was of a friendly though formal character. The central figure was M. Alapetite, the Resident-General, who is the Minister of France in Tunis, and near to him on the platform were Dr. Porot, the General Secretary of the Congress, Physician to the French Hospital in Tunis and the originator of the new mental hospital, the Inspector-General, M. Granier, an able administrator of "public assistance," and representing the French Minister of the Interior, Dr. Grall, the Medical Inspector, who represented M. Lebrun, the French Minister for the Colonies, Dr. G. de Couvalette, the principal director of the Naval Medical Service who represented the French Admiralty Department, Professor Simonin, Principal Professor at the Military Hospital of Val-de-Grace, delegate representing the French Minister for War, and Surgeon-Major Cazenove, of the Army Medical Service, who also represented the French Minister for War. There were present on the platform in addition M. Blanc, the administrator and General Secretary of the Tunisian Government, MM. Curtelin and Chabert, Vice-Presidents of the Municipality of Tunis, M. Roy, Minister Plenipotentiary, M. Reverdin, the Public Prosecutor of the French Republic in Tunis, and various members and officers of the Congress, including delegates from Russia (Dr. Bagenoff), Belgium, Switzerland, Holland, Italy, as well as of Great Britain and Ireland (the writer).

The Resident-General, M. Alapetite, welcomed the members of the Congress in the name of His Highness the Bey of Tunis (who is nominally drawn into these salutations, but in regard to which he appears to betray no interest), and delivered a very able address. He was glad that members had the opportunity of seeing the capital of the French Protectorate, which, although centuries behind civilisation, had yet developed so much within the thirty years of French government that it was considered a suitable place to receive this Congress. Tunis paid fifty million francs in taxation, which, upon the ratio of the population, is exactly one-half of what France pays; by which it might be argued that the mean income of the Tunisian was also one-half that of the Frenchman, but this was far from being the case, the population of Tunis being mainly very poor, and consequently public or poor-law assistance was a most difficult task. When the Protectorate of Tunis was first established, assistance to sick and needy Europeans had virtually no existence. It was only organised by degrees, and then largely by private persons and private benevolence. Later it was possible to assist private enterprise by a small state subvention, and the commencement was made towards helping the two extremes of life, *viz.*, young children and old persons who were most in need. In this connection he thanked, and deeply so, those devoted French people who, of their own free will and in their own time, had constituted the French Public Welfare Society. A heavy burden upon the administration of Tunis was the building and supporting of a civil hospital, to which is now attached a wing or pavilion for mental cases, but here in Tunis they had public spirit and were ready to undertake the necessary expense. The arrangements for the French insane hitherto had been to transport them to their own country, and as the European-French population was really less than that of two or three cantons, they had not up to the present been able to afford a mental hospital. Even in

France there were several departments without one, and when established their cost was shared by the State, the Department, as well as the local community or parishes. The places for early observation and treatment of these sad and appealing cases were, in Tunis, usually defective and always insufficient, and it was to provide a suitable home for their early treatment under the most advanced medical and hygienic conditions that the Tunisian Government had undertaken this task, and he hoped the result would be a credit to its "public assistance" towards the poor. He stated that for those who were very poor, whether natives or foreigners, there was, even before the French Protectorate in 1880, some kind of place into which the poor insane could be received, either at the request of their families or through the intervention of the State, and such places still exist, but need much improvement. Medical aid for the necessitous poor must be an organisation of considerable time before it becomes effective, and as to hospitals, it was necessary to convince the natives that the treatment of their families in them was kindly and real; the confidence of such a clientèle must first be won, but in this regard the work of the few French doctors in Tunis was having a markedly beneficial and moral effect; especially important must this confidence be before the new mental hospital can be fully appreciated. This little hospital for mental cases, the Resident stated, would be open to all races and to all nationalities, and they in Tunis were prepared for the cost of this heavy burden, because it was an advance and a great step in the progress of civilisation. The Government would gain by being saved the necessity of deporting their insane to France, the families and friends of the insane could visit their afflicted relatives, and the art of medicine would be benefited by the additional experience gained from the study of mental and nervous diseases.

On the second day the organisers and officers of the Congress, together with the delegates (including the writer), were received by the Resident-General, M. Alapelite and his wife, with whom they subsequently lunched in the Maison de France (the Residency). Following this, a garden-party was given by the hostess, who was "At Home" to members of the Congress and their wives. The hospitality, kindness and delicate touch of refined grace and tenderness which the hostess displayed towards her guests were especially noted; and on the next day, when she received all members of the Congress at a crèche which she herself had established, and later in the day at the special Dispensary which she had inaugurated and was supporting, and which bears her name, it was seen by all of us how much benefit the civilisation of France was conferring upon her colony, also how much of this was done through the "charity of wisdom" as well as through the "charity of sympathy" which the Resident-General's wife had initiated and continued.

One of the most striking sights of Tunis in the writer's opinion was the interest shown by Mme. Alapelite in works of philanthropy and charity. In nurses' costume she organised and supported the staff of devoted women who looked after the French poor, as well as after their infants, in the dispensary and crèche. The writer felt this civilising effect of French women in their own colony to be the most striking,

stimulating, and heart-stirring feature of medical assistance outside his own country, and he was most gratified with the experience.

The opening at the General Hospital of a new wing for mental and nervous diseases in Tunis was an occasion of much mutual congratulation. Dr. Porot, the Congressional Secretary, performed the ceremony, and made graceful references to the help he had received from the Resident-General and from M. Blanc, the Secretary of the Government of Tunis. There are complete sitting and observation rooms for day and night, well-ventilated and large single and associated rooms, baths, lavatories, case-taking rooms and gardens. It is proposed to treat the acute cases, of which there were several on the day of opening, in this new block, and when recovered they are to be transferred to the General Hospital, and thence discharged. This plan of dealing with insanity emphasises the view that mental disease is primarily physical disease, and such treatment tends to break down the prejudice against mental disease in a way that no other method can do. It certainly deserves recognition in our country.

The paper by Professor E. Régis, so well known to all English-speaking alienists and psychiatrists, was upon the "Care of the Insane in the Colonies," referring particularly to French colonies, but extending his observations to the work done in English colonies, including Egypt, India, Australia and the Cape. This paper, covering over 200 pages of type, was given to the Congress by Professor Régis in about an hour and a half. It is an invaluable and laborious compilation of the treatment of the insane in many lands, and the part relating to France was collected from naval, military, colonial, and civil medical men throughout the French colonies. So much appreciated was this report that the Colonial Minister has given it State aid in order to make it more widely known. The work is in three parts: the first is a historical survey, with a general summary of what has been done up to the present in the possessions of other countries; the second records what has been done in the French colonies; and the last part is devoted to recommendations. As to the last part first, Dr. Régis urges (*a*) the establishment of "mental" annexes to general hospitals for special mental or delirious cases, such as those suffering from early forms of insanity or brain lesions accompanied with mental changes, as the study of such cases will induce an interest in psychiatry which is essential from the medico-legal standpoint, and also will assist the duties of the colonial military and naval surgeons. Insanity is curable in inverse relation to its duration, and the education of the young practitioner is bound to form a great part of the prevention of insanity. Dr. Régis quotes his own University of Bordeaux as thus encouraging the early diagnosis and treatment of insanity, and the interest kindled among its students in the study of mental diseases has helped to formulate public opinion, and has even brought influence to bear upon lunacy administration; and (*b*) he calls attention to the variable and defective legislation on the subject in the different French colonies. In some, such as Tunis, there are no laws relating to the insane, in others, only a modification of the French Law of 1848, and he advocates the same legislation for the colonies as exists in France, or to leave each colony to enact statutes suitable to its local needs. (*c*) He recommends the erection of special

receiving houses as a first line, and places in touch with these for the transfer of the more chronic on colony methods as the second line, but provided with means for varied occupations, and these establishments to have for the subordinate medical staff native doctors, but the chief to be an experienced psychiatrist. Following upon these recommendations, he gives the necessary indications for all the French colonies. He urges his views because those who serve in the colonies are entitled to have places to go to when they break down from any of the acute psychoses, and he agrees that those Europeans whose cases have become chronic should be returned to their native land. He further urges that the expansion of colonial methods should provide at least some care for colonial troops and others who may suffer from insanity; such arrangements would be only humane and should be foreseen and prepared for. In this part of his paper he wages a strong crusade against alcohol, which he states in some colonies of France to be a worse enemy than sleeping-sickness or malaria. Such a crusade can best be continued by the education of the native population, and also by aiming at lessening the prejudice against insanity and by encouraging its early treatment. Lastly (*d*), he advocates a special examination (including one on the mental side as to family histories and predisposition) of all those who go out into the colonies, whether as civil servants or in a military capacity. Such an examination would probably save much expense and many heart-burnings as a preventive measure. The historical record of the French colonies in regard to the care of the insane shows that the older colonies, such as Guadeloupe and Martinique, have had some modified treatment for their insane since the early part of the nineteenth century, but the more recent colonies have no treatment of any kind; others possibly have some indifferent and unsuitable accommodation in the chief town of their colony. The forms of insanity among a new people are mostly of the toxic and infectious kind, essentially curable if only taken in time. The incidence of insanity among Europeans in the French colonies averages about 1.7 *per cent.*, and the number of French soldiers brought back into France every year is about fifty. Whilst England possesses seventy-four asylums in its colonies, Australia twenty-six, and the Dutch Indies (Java) three, Algeria has none, yet it is estimated that at least 4,000 of its population have become insane; 1,230 of these are already in the asylums of central France. Tunis has now a special mental hospital of its own for Europeans, but an asylum for 200-300 is really wanted in addition, for the use of the native population, who, when insane, are now transported in a deplorable state to the Asylum of St. Peter in Marseilles, a few suitable cases only being housed in a modified infirmary for the aged and the vagrants. In Morocco it is estimated that there are 15,000 lunatics with no provision at all for their care. In West Africa (Senegal) all the Europeans and some natives are sent to the St. Peter's Asylum in Marseilles; others may be detained in the civil hospitals. In French Equatorial Africa they are similarly dealt with. In Madagascar there is at present satisfactory accommodation for 100 patients, but more is needed. In French Indo-China, for 18 millions of people, there is no accommodation at all for the insane, but Europeans may be sent on to the asylum in Marseilles. It is interesting to note that

general paralysis is rare in Tunis, and melancholia common, especially among the Jews, but I propose to make this matter the subject of some remarks in a later paper.

The discussion on Dr. Régis's paper was full and interesting, and various communications relating to the care of the insane in the different French colonies were made.

Dr. A. Marie brought a report of the new asylum in Cairo, as well as a record of what was being done in our own colonies and other dependencies as well as those of Holland.

Dr. Grall referred to Professor Régis's wide influence and persistent efforts to improve the lot of the insane, both at home and in the colonies, by his keen teaching and strong advocacy, and his widely read contributions to mental literature.

Dr. G. Martin sent an account of the psychiatric teaching in vogue at the medical school for military and naval medical men at Marseilles.

M. Blanc referred to the effects of alcohol in Tunis, which were to some extent controlled among the native population by their Mohammedan religion. He alluded in detail to what was now being attempted for the insane in Tunis.

Dr. Vital Robert presented an account of the new scheme for the treatment of the insane initiated under him in Madagascar, and he quoted statistics relating to insanity and the increase of crime in the island due to alcohol since the French occupation.

Dr. Simonin referred to the anxiety and troubles caused in the recent Russo-Japanese war by cases of mental disease, which occurred both among the troops and the staff, and he suggested the possible assistance which may be afforded by help from psychiatrists during the progress of a war.

M. Cazenove described the treatment of the insane by native nurses in Africa as gentle, forbearing and kind, owing partly no doubt to the religious and sacred feeling which the presence of insanity excites in the native mind. He referred to the injurious influence of alcohol throughout the French colonies. He pointed to the many dangers, mental, physical and moral, from this cause, and referred, in his remarks, to the form and frequency of insanity among the natives, also to its origin and its relation to religious beliefs.

Various resolutions bearing upon the subject of the insane in the various colonies were put to the Congress and unanimously carried. A special resolution relating to the great public peril incurred through the increased use of alcohol in the colonies was also passed, praying that legislation should be enacted "to control its use and sale, as it was one of the great agents of crime and insanity, and a deadly poison to the native races."

An interesting paper, which only a conscription country can fully realise, was read by Surgeon Major Haury, entitled "Hooligans in the Army and their Rational Treatment." He pointed out there were many of these in the French Army because they had not received sufficiently severe sentences to be sent into the battalions of Africa. It was recognised that their presence with sane and normal youth was objectionable and a Bill should be passed to separate them. These persons are very dissimilar medically, varying from the accidental and the habitual

criminal on the one hand, to those who are weak-minded cranks on the other. Many of them form recruits for asylums for the insane, and include cases of primary dementia, perverts, paranoiacs and moral imbeciles. What would be the treatment if these were rejected by the Army, and would such be possible? Such a scheme would be twice blessed! Dr. Haury suggested that the army would benefit by their absence, that society would benefit by their withdrawal, and they themselves would receive rational treatment. In a conscription country this must be a very serious problem, as every person has to serve his time or advance reasonable excuse for not doing so. No excuse would be offered by the weak-minded, the degenerate and the feeble, but they would, and do, create infinite trouble. The paper suggested a general examination culminating in the psychiatric study of all offenders. Neither the sentence received nor the crime committed would serve as a satisfactory criterion of the mental state. There must first be a sorting of these offenders, who were all characterised by different mental deficiencies, and he indicated the treatment for the lighter forms; the more severe he suggested should be sent to Marseilles into one large general institution, where their continued detention could be adequately supervised. Evidently the question of the amount of mental unsoundness consistent with useful service is a serious one in a country where all the manhood is compelled to serve in the Army.

The paper upon "Perverted Instincts" by Dr. Dupré will be found especially useful to those who are studying criminology and degeneracy. "Instinctive perversion" is a term frequently used in the language of psychiatry. One meets with it in all clinical observations, medico-legal reports, and in medical certificates of detention; also in describing abnormal children who may be, and usually are, mentally defective, and especially if these possess vicious tendencies, when they are then described as cases of moral insanity or moral imbecility. A definition was necessary, and an analytical study of mental states was also necessary. Further, if possible, an enumeration should be made of those who come under the definition, cases such as those of mental degeneracy, of abnormal character and conduct, whether in infancy, youth, or adult age. The history of the condition as described by French alienists was given by Dr. Dupré, and an attempt was made to trace these perversions to the developmental period of life in order to account for those singularities and abnormalities that fall short of definite insanity, or such as may characterise those offenders who commit acts contrary to the advantage of self or against the social welfare, and who appear in police-courts as incorrigibles, rogues and vagabonds. It was pointed out that many of these cases betray physical and mental stigmata or degeneracy, and a new point was made when it was stated that they show more or less specific signs of "l'heredo-alcoolisme," as in this country we are not quite clear what, if anything, this term may signify, but it was added, they also show signs of hereditary tuberculosis, and if this means a tendency to tuberculosis there is much to be said for the statement; it was further stated that many of them show signs of hereditary syphilis. Certainly there are signs of hereditary syphilis to be seen in many of these cases, as is evidenced in the photographs of the "black-listers" circulated by

our own police, and seen in the teeth, lips, nose, eyes, and the shape of the head. The suggested classification (which is not original, but was advanced by Herbert Spencer years ago, and adopted by Mercier) certainly helped to reduce order out of chaos. There had long existed a need for classifying obsessions, impulses, emotional storms and explosions, weak-mindedness, fixed ideas, moral obliquities, degenerative vices and instability, and the division of perverted instincts according to the nature of the instinct, whether directly self-preservative and relating to the life of the individual or indirectly self-preservative, as in the reproductive instinct, or in relation to man's social environment or the power he has to adapt himself to life in a community, was the basis of Dr. Dupré's paper. Deviations from the directly self-preservative instincts were first considered, the search for food, for instance, and in this regard voraciousness, gluttony, and its opposite, the refusal of food and the fear of food, were all mentioned; next, the satisfaction of thirst, as a natural instinct, with deviations therefrom such as occurred in drunkenness and dipsomania were instanced; strange cravings of the appetite were referred to also, the habit of accumulating, of saving and of spending, the instinct of greed, cupidity, thefts, and swindling were all explained as perversions when extreme; he particularly instanced the reversal of the instinct of self-preservation, viz. suicide. The feeling connected with the personality, such as inordinate vanity and shyness, and those connected with reproduction were also fully described with their varieties observed in weak-minded and unstable persons. It was pointed out that the study of criminology was full of such abnormal instances. The reversal of the natural instinct of motherhood was noted in post-puerperal cases, and the feeling which led fathers and mothers to desert their families was also explained on this basis. Perversions of social relationship were noted in those who refused to take their share of the social burden, and in those who worked against altruism and disinterestedness, those who refused to pay rates and taxes, "conscientious objectors," agitators, revolutionists and anarchists, all being classed in this category of perverted instincts. These were antagonistic to benevolence, to compassion, to mutual aid, to devotion and to public work. These three groups of perverted instincts, viz., (a) personal and self-conservative, (b) sexual and genetic, and (c) altruistic or collective and associative, included most of the perverts, moral imbeciles, and a large group of clinical cases met with on the borderland as well as among the actually insane, also the inebriates and the delinquents, as many of these bore the stigmata of degeneration. Wastrels, "ne'er-do-wells," unemployed and unemployables, vagabonds, vagrants, incapables, and undisciplined vicious persons were all included among perverts, and for these Dr. Dupré entertained but little hope of amelioration by special treatment, and would have them all interned in establishments intermediate between the asylum and the prison, both for their own and for the public safety. In his opinion it was an illusion to expect permanent improvement in these cases, and he was no optimist as to their successful permanent cure. He considered such a view to be a delusion of philanthropists, optimists, and of the religious teacher as well as of the metaphysical theorist. The discussion upon this paper showed some diversity of opinion.

M. Anglade considered there were great interests raised by this paper, especially to the magistrate in his ministerial capacity, as he frequently had to consider responsibility in regard to weak-minded young persons who suffered from congenital "insufficiency," as well as in regard to those who suffered from "perversions." He himself would wish to have heard more as to the responsibility in senile involution, as it was by no means easy to fix and delimit the amount of perversion which should be considered sufficient to justify the plea of irresponsibility in these cases. He disbelieved in the education of young perverts as carried out in our penitentiaries; but he was by no means such a pessimist as the reader, still having faith in good surroundings and the force of good example. Of all measures he believed work in the open air on the land to be among the most effective agencies in the treatment of these perverts.

Dr. Régis (Bordeaux) also believed in the possible amelioration of perverts, more particularly those who are sufficiently developed mentally to respond to educational efforts. He quoted the successful results of the St. Louis Colony near Bordeaux in the Gironde, which receives and educates children of this class. He urged the necessity for establishing reformatories similar to those in America and about to be established in England, but he felt there should be an alienist attached to these houses as well as an educational master.

M. Vigouroux was also very encouraging about the training of the moral imbecile, who always suffers from certain intellectual irregularities as well. He spoke of the dangers to the weak-minded connected with the period of puberty; but urged that with good discipline and good example it was possible so to ameliorate the pervert that he could return to normal life and lead a useful citizenship. He quoted the good results obtained among intelligent cases of moral perverts and imbeciles sent between the ages of sixteen and eighteen to the school of Theophile Roussel of Montesson.

M. Claparet felt keenly that happy results were obtained by gentleness and patience when special educational efforts were made and, he ventured to think if such results were not obtained it was because there were not persons capable of supplying the suitable training.

M. Pactet spoke of the utility of ordinary education for perverts of all kinds, particularly if above a certain age. Society he felt must defend itself against this class. In institutions, especially in asylums, they organise rebellion and create disorder, from the results of which they themselves manage to escape. He felt the only treatment was for the magistrate to order these cases into establishments of a nature between the asylum and the prison, and such houses should be especially created.

Dr. Ley was hopeful of the results of education, and recorded the work in English reformatory training, which is really not for the mentally defective or the pervert—such conditions being a disqualification—but this was not apparently known to the speaker.

Dr. Voison quoted his experience at the Salpêtrière, where there existed a training establishment or a reformatory for girls of every grade of psychic abnormality. In ten years, out of 200 girls, only five had to be sent to asylums for the insane, the others, after elementary

educational instruction and constant industrial occupation suitable to their needs, having gone out into ordinary life, and subsequent reports of them had been satisfactory.

Dr. Ballet confessed he was in entire agreement with the reader of the paper, and described himself as a pessimist in regard to the moral amelioration of the pervers. He knew that many of these persons offended against society in an incomplete, half-hearted kind of way, and they could best be described as half-mad. The question was, ought they to be punished? They certainly ought to be put in places where they would be unable to injure society. For the idea of inflicting punishment should be substituted the proper one in the first instance of defending society, and before these persons could be punished it should be ascertained first if they were responsible. Criminals, he believed, whether occasional or habitual, were all by instinct "perverts," and their correct treatment would be to organise a regular method of medico-psychological examination before inflicting punishment upon them. It is not certain whether our ideas ought not to be changed, certainly widened, upon the subject of punishment.

M. Vallon advocated the more complete study of criminality, and urged that medical men should be placed at the head of institutions into which these cases were to be received.

M. Pactet reminded the meeting that he had proposed at the Lisbon Congress a medico-psychological service in the institutions where these perverts were detained, but his proposal, although adopted by the Congress, had met with the strongest resistance from Government sources.

Major Chavigny, of the French Army Medical Service, presented a paper upon the mental and nervous complications of malaria (paludism). He reviewed cases reported in the medical literature of malaria which had presented these symptoms, and he was surprised at their great number, but upon closer investigation he had been led to conclude that these symptoms were often accidental and not dependent upon malaria. As to the true nervous symptoms dependent upon malaria, he classified them into peripheral and central. The latter included aphasia, transitory hemiplegia and local paresis, all of which passed off when quinine was administered. He himself had noticed peripheral neuralgias—most often of the trigeminal nerve, the sciatic, the occipital and the intercostal; and cases of neuritis and polyneuritis had been described by other authors, notably by Catrin, Metin and Jourdan, Dopter and Sacquépée, and the symptoms had been confused with alcoholic peripheral neuritis. Remlinger had described myelitis consequent upon malaria, and others had observed transitory medullary paralysis and myelopathies where malaria could be the only ætiological factor. As to the mental complications, it is most difficult to assert definitely their true causation, for malaria, alcohol and constitutional predisposition to insanity are often combined, and there was a tendency on the part of some authorities to blame alcohol for all the psychoses which supervene in cases of malaria when the former is taken in any degree or form. Epilepsy was a form of nerve disorder often associated with malaria in the French colonies, and acute hallucinatory mental confusion was also frequently met with, worse at night and associated with

terrifying dreams. In subacute cases of malaria, delirium is often seen at the onset of the other symptoms of malaria. In some chronic cases of malaria one may meet with mental symptoms, but they often appear to be unconnected with the malaria, although in others they pass off under the quinine treatment. The highest opinion to-day does not recognise a true form of malarial psychosis, yet malaria may be the exciting cause acting on a predisposed subject, and it may also be that the predisposition to break down acts upon a subject lowered in vitality, and thus prepared for the psychosis by malaria. Both these theories have their advocates.

In the discussion Dr. Dumolard, of Algiers, related the nervous complications which had occurred in ten cases out of a total of 200 observations. Five cases were those of cerebral coma, of which two had died, one was a case of hæmorrhagic meningitis followed by death, another of hemiplegia (with the parasites in the brain), one of cerebro-spinal meningitis with lymphocytosis; two others had meningeal symptoms, one of the Landry's paralysis type cured by quinine.

M. Grall called attention to the bibliography of the subject, in which these nervous symptoms were referred to as far back as 1840 by Dr. Sigund of French Guiana and Antigua.

Dr. Régis agreed that alcohol had no monopoly as the cause of acute and terrifying hallucinations; all intoxicants and all infections produced them, and malaria in its turn could also produce them, but he had often noticed that cases of malarial delirium have alcohol as a predisposing factor. It is not the drinking that is to blame, but more often the nervous predisposition to breakdown and the failure of the eliminating organs. The result of malaria in his experience was an extreme physical and mental weakening. He had seen serious dyspnoea as well as disturbances of consciousness, such as failure of memory, in these cases. The failure and decay in these cases could only be explained by the presence of malaria.

Dr. Vigouroux (Vaucluse) showed some histological preparations and related the clinical history of several cases. In one case, after twenty years of good health, the patient was seized with intermittent fits of mental confusion lasting several days, but followed by complete recovery lasting two to three weeks. He died comatose in another fit, and at the *post-mortem* examination the liver was found to be cirrhotic and the spleen malarious. In fourteen out of sixty cases of general paralysis under his care there was an association of malaria and alcohol, as verified in the *post-mortem* examination.

Dr. Simonin referred to memory troubles in two cases which were due to malaria but were attributed to alcohol; in another polyneuritis was attributed to alcohol whereas the true cause was malaria.

Dr. Anglade added his testimony that alcoholism may be attributed as the cause of mental symptoms, whereas the real ætiology is paludism.

Dr. Régis communicated an interesting paper by a naval surgeon Dr. Hesnard, on the diagnostic difference between malarial and alcoholic delirium.

On my way to Tunis I visited the asylum into which some of those European Tunisians who became insane were received, *viz.*, the Asylum

of St. Peter at Marseilles, the only public asylum of this, the second city of France. The front, facing a main road, is the administrative block, and there is here a plot of well-laid-out garden with trees and flower beds, which were the only flowers I saw there. I was courteously received by the Deputy Superintendent, Dr. Cornu, who went round several of the male wards with me, and who seemed much appreciated by his patients. I was not taken over any female wards. It was the dinner hour for patients and staff, both dining in the wards and at the same time, the only difference being that the staff had a separate table. Wine, a quarter of a litre, was provided for both. It is a very old asylum, built in 1844, but added to in more modern times. It is stated to have grounds covering ninety acres, and provides accommodation for the poor in one part, and for paying patients in separate blocks. There is a colony for sixty farm workers and accommodation for twenty epileptics not insane. The patients exercised in cramped small courts interspersed, as it were, between the different blocks, many of which are connected by covered ways. The day rooms were very bare; I saw no newspaper nor book, no birds, flowers, pictures, nor means of amusement and distraction on the walls or elsewhere, and I saw no piano except in the private patients' block. I saw some dormitories with flagged floors which had rows of wooden box-beds with beds of straw, and the windows were unglazed, but provided with shutters, which were kept locked with chain and padlock from the inside. The asylum accommodates about 1,200 patients, many of them being re-patriated from the colonies. I understood there were four doctors and a lay-director at the head. The place was said to be visited by the Precureur de la Republique, the Prefect of Police, and the Commission of "Surveillance."

Patients were admitted on the order of the Prefect of Police, accompanied by a medical certificate, under which detention lasted two weeks; if further detention was necessary then two certificates were needed. The acute block seemed to provide an ample number of single rooms, which were lofty, roomy and airy. I saw several varieties of low-typed idiots and others who were separated from the rest of the patients, but no effort seemed to be made to train them. The whole place was very prison-like, except the private patients' quarters, and no scientific work of any kind seemed to be carried out. I saw an Englishman in detention there, and felt for his expatriation in his illness, but he had been living in Marseilles several years, and seemed unlikely to leave this place of his entombment.

The excursions of the Congress included some to Sfax and Gabès, also some into the desert and to Kairowan, others into Algiers through Constantin, visiting Biskra, the "Queen of the Desert," but the writer had no time for any of these. He made a visit, however, to the Arab quarter of Tunis, and greatly admired the dignified, if not aristocratic, calm of the native Arab. The central bazaars of the native quarter, the Mussulman customs, their devotion, their relation to their Jewish neighbours, and their apparently complete disregard of sanitation (as we know it), which must exact an enormous penalty in regard to infantile mortality, were all a new view of life. The different kinds of dark races in the town were an interesting ethnological study; the

separation and isolation of their women, their customs and appearance were a refreshingly new experience.

An excursion to Carthage, formerly the rival of Rome and the mistress of Spain, Sicily and Sardinia, now only a denuded hill, was, nevertheless, full of archæological interest. At the time of the first Punic war Carthage was a city of twenty-three miles in circumference with a population of 700,000. The remains of this mighty city are to be found to-day in every museum in Europe, and much of the city of Tunis itself has been built from its ruins. Its site even now is singularly beautiful, on the sloping shores of a magnificent and well-watered bay, sheltered from the north and west. Before the Roman wars the city of Carthage was Pagan, and given to the sacrifice of human victims, and this was evident in the extensive and valuable museum, the Museum Lavigerie, which Père de la Lettre, one of the White Fathers, showed to us. There were literally hundreds of small sarcophagi into which human sacrifices had been placed, and there were many symbols of votive tablets with the disc of Bâal the upright hand, the crescent of Astarte, palm-trees, rams and human sacrifices to Bâal to be seen in this valuable museum.

Following the Roman occupation and after the third Punic War, Carthage saw the uprooting of Paganism, and it became the first Christian seat of religious teaching in North Africa, and Christian inscriptions, such as "In peace," "Faithful in peace," "Innocent in peace," are seen among the collections in this Museum, founded by Cardinal Lavigerie. In what was said to be the Citadel is now the Byrsa, where the Tunisian merchants spend their summer in tidy villas and larger mansions. At the end of the spur on this site are said to have been the Temple of Æsculapius, where the patriotic wife of Asdrubal went to her death by fire, also the Palace of Dido, where from her funeral pyre she saw Aeneas sail! Close to this site is the great memorial cathedral of St. Louis, built by Charles X in 1830, and where Cardinal Lavigerie lies buried. Excursions were also made to other places of interest in the neighbourhood, and Tunisian hospitality was most cordial. One, a visit to the "Red Cross," a dispensary where we were received by the Ladies' Committee of the "Red Cross" Society, was most interesting. The excursion to the Museum of Bardo, when we were especially under the guidance of M. Merlin, was most informing and as educative as it was pleasant. This museum contains the most noted and largest mosaic pavement in the world, and its collection of statuary, lamps, urns, inscriptions, pottery, bronzes and mosaic pictures is truly wonderful. Formerly the Bey's Palace, it now contains the best single collection of Carthaginian remains in existence. One of our excursions, *viz.*, that to the Sadiki Hospital for Arabs, was under the guidance of Dr. Porot, who gave the history of the Arab Palace before its use as a hospital, its present use having been effected through his skill and interest. The garden with its Bougainvilleas, quince trees and meandering streamlet and with its Oriental trees and flowers was beautifully refreshing.

Leaving Tunis and travelling northward under the Spanish aqueduct behind the Bardo—the former palace of the Bey of Tunis—through olive groves, the writer passed along the road to Bizerta, where among

the harbingers of spring a pair of swallows waited in an open restaurant for the fair wind to cross the Mediterranean! The road from Tunis lay across broad expanses of alluvial plains, covered here and there with small petunias and speedwell, also with scarlet poppies (coquelicots) and yellow doronicons—the colours of the Royal Spanish House and the only cheerful reminder of the past dominion of Spain. The small cultivated plots, marked out by opuntia hedges and sheltered by Aleppo pines (*Pinus halepensis*), acacias and shaggy eucalyptus trees, showed the care and thrift of some of the scattered inhabitants. It was on this journey that the writer came across the Bedouin Arabs with their camels and tents, but the journey permitted no closer acquaintance than a passing glimpse of them.

Before the end of his journey the writer took the opportunity of visiting the Ste. Anne Asylum in Paris, the acute receiving house of the city through which pass about 4,000 cases a year, the patients being afterwards distributed to the various large asylums around Paris. The writer was unfortunately unable to see the venerable and highly respected Dr. Magnan, whose acquaintance he made over thirty years ago, when he contributed to the *Journal of Mental Science* a short account of a visit to asylums in Paris. Dr. Magnan is in his eightieth year, but active, energetic, and devoted as ever he has been to the cause of the poor insane. In 1908 he celebrated his jubilee of service at Ste. Anne, but as my visit was made the Saturday before Easter Day, and he was as usual spending the week-end out of town, we did not meet. Your readers probably all know the fortress-like Institution of Ste. Anne, built in 1867, and many have attended its clinics. It is quite within the City of Paris, has high stone walls round it, and its blocks are high stone buildings—from one to four stories—with tiled red roofs. There is a central administrative department in which Dr. Magnan lives, faced by a block of four stories, where other medical officers live, and a lay governor's house in its separate garden. I was particularly interested in seeing the line of treatment, and made a visit to the most recent cases with one of the medical officers. I arrived about eight in the morning, and was at least an hour too early even for the French doctor's medical round. The large number of cases of primary dementia of all ages struck me greatly, but there were not many cases of general paralysis. The treatment adopted was mainly the bed treatment; no morphia and no sulphonal were used, only bromide and chloral as hypnotics. I saw no mechanical restraint, but an acute patient had five or six others holding her down on a mattress on the floor in one of the acute wards at my visit. The bedrooms or dormitories had all floors of polished wood and there were very few patients out of bed in the infirmaries or wards for recent cases. There was an excellent medical reference library, but I was not shown the laboratories. All police cases are brought into Ste. Anne Asylum first, and when their cases are known they are sent to various separate institutions. The plain appearance of the wards and the institution-like character of the place were in marked contrast to our more homely surroundings in England, as is the case in all asylums where the administrative director is not a doctor. The chief officials of the asylum are, I believe, appointed by the Minister of the Interior, and the lay officials and attendants by the Prefecture of Police.

I am indebted to *La Presse Médicale* (through M. Jean Abadie) and to *La Tunisienne* for reports of the Congress, and for the names quoted in this paper. Dr. G. de Couvalette's great archæological knowledge and scholarship were most helpful to all of us in the excursions to Carthage, and to the Musée Alouai (Bardo). During my stay in Tunis and on the journey thither from Marseilles, as well as in the arrangements for travelling, I have to acknowledge the extreme kindness of Dr. Porot, the able Secretary of the Congress, as also the courtesy and much-appreciated friendliness of Drs. Régis and Semelaigne, to all of whom I am deeply grateful.

Epitome of Current Literature.

1. Physiological Psychology.

Freud and the Problem of Dreaming [*Freud et le Problème des Rêves*]. (Rev. Phil., Nov., 1911). Kostyleff.

Some who view with more or less sympathy Freud's elaborate efforts to unravel the obscure threads of various morbid neuro-psychic states have been unable to accept his conclusions in the normal psychological field of dreams. Kostyleff, who has elsewhere shown himself a highly competent exponent, sympathetic and yet critical, of the Freudian school (as in a study of psycho-analysis in the same review for April, 1912), here inquires how far the doubts concerning Freud's dream psychology are justified. Throughout he analyses afresh many of the dreams brought forward by Freud, being in many cases unable to accept Freud's analysis.

Freud's material is very interesting, and his interpretations very suggestive, but he allows himself to be carried away too far, and frequently repels by the arbitrary character of his conclusions. At the same time he makes an excellent attempt to synthetise the phenomena. Observation alone, indeed, will not suffice to explain such complex phenomena. It is not enough to note a condensation here, a change of value there. Some general law of the organism must be brought into play. The mechanism of dreaming, according to Freud, consists in the return of the psychic current towards the mechanism of actual perception. In this return towards the initial process of perception, though rather variously and crudely schematised, Kostyleff finds Freud's great and unquestionable merit. At the same time Kostyleff holds that, rightly considered, this formula takes on a different character. Freud maintains that all dreams are constituted out of wishes, which, to become dreams, need an organic re-inforcement, and that this can only be provided by infantile desires of the same nature, preserved in the unconscious. Not so, says Kostyleff. Previous reactions are motor dispositions not limited to affective phenomena. Every reflex consolidates the channels it passes through, and facilitates the return of similar reactions. This applies to altogether neuter imagery as well as to imagery determining a volitional complex. The neuter imagery may even, under some conditions, have the advantage over the wish.

Any consolidated memory may thus furnish the necessary reinforcements. Sometimes the memory may be a wish dating from childhood, but to say that this is the case in every dream is an exaggeration. Far from always presenting the realisation of a wish, dreams often present an impression reinforced by memories with which it is simply associated.

Further, Kostyleff considers that Freud's conception of "censure" must be understood in the more precise sense of a dissociation of cerebral reflexes. Certain images are found incompatible with the momentary complex of the ego, and an arrest of the associative process occurs.

In analysing anew some of the dreams brought forward by Freud, the author argues that Freud's interpretation of them is often artificial, and that it would sometimes be simpler to see in them, instead of an infantile wish, an actual pre-occupation reinforced by more or less remote memories. Again, in regard to fantastic dreams, having no apparent relation to real life, the author finds that Freud's symbolic interpretation is altogether subjective. Freud's final conclusion that an unconscious wish plays the motor part in all dreams he regards as quite unproved, and not the result of legitimate analysis. It may even be regarded as the exact opposite of the truth. Dreams are remarkable by the richness of their content, and cannot be fitted into Freud's narrow frame. It is necessary to recognise the most varied forms of sensorial regression, not only the regression of desire, as commonly observed in children, but the regression of the most fugitive images under the chance influence of functional reinforcement, independently of any affective factor. The search for a disguised wish then loses nearly all its significance. Even when evoked, its appearance is often the consequence of preceding evocations and not the efficient cause of the dream. The dream is a series of sensorial regressions due to psychic reinforcements and merely tinged by the revival of a wish.

The author finally records his conviction that the irregularities in Freud's psychology of dreaming, and the modifications which are demanded in its formula, must not disguise from us the substantial merits of his work in this field. It may, he believes, serve to open the way to the experimental study of dreaming. HAVELOCK ELLIS.

The Alleged Contagion of Mania and Melancholia [*La Contagion des Manies et des Melancholies*]. (Rev. Phil., Dec., 1911). Dumas, G.

Pursuing his studies of contagion in mental disease, the author here takes up mania and melancholia, leaving open, for the purposes of his discussion, the question of the unitary nature of manic-depressive insanity. He points out at the outset (with Halberstadt) that there is a pronounced distinction to be made between the contagion of a delusional state—such as is often observed clinically, and is usually episodic, temporary, and influenced by isolation of the patient—and the contagion of a definite psychosis with its own ætiology and regular course. Can we speak of contagion in the latter case? As regards mania and melancholia there is a marked opposition of opinion. Thus, in Germany, it has been commonly accepted (though denied by Meyer and others), while in France it has been commonly denied (though accepted by Marandon de Montyel and others). Such divergences of

opinion among experts, Dumas remarks, can only be due to a varying interpretation of the facts, and a critical investigation of these becomes necessary. Such investigation may make us sceptical, not only as to the reality of the contagion, but, in some cases, as to the correctness of the diagnosis. In other cases the report is so summary or so incomplete that we are placed in the unsatisfactory position of having to accept the reporter's mere assertion.

Putting aside these reservations, we still have frequently to face the usual embarrassing question as to the possibility of a family psychosis. The existence of several famous cases in which twins, living apart, have manifested the same psychosis under the influence of an identical predisposition and similar occasioning cause, suffices to invalidate many cases of alleged contagion between members of the same generation in a family. Moreover a direct heredity of mania and melancholia, the liability to attacks being transmitted from parent to child and even to grandchild, has been shown (especially by Damköhler) to be not infrequent. We have also to remember that persons of similar predisposition may live together and be subject to the same exciting causes of insanity.

These considerations are fairly obvious. But even when they are put aside, it is found that many clinicians fail to realise that a great many causes may lead to one case of mania or melancholia following another without the intervention of any real psychic transmission. A specially important cause is exhausting physical and moral strain. Various cases are brought forward and thus explained. In another class of cases the first case certainly exerts a psychic influence on the second case, but it is a traumatic emotional influence, such as may be exerted by any violent shock; it is not contagion. In a third class may be placed the numerous cases in which contagion is undeniable, but in which we are not always really in presence of mania or melancholia in the first patient, and never in the second. When, Dumas finally concludes, we have allowed for the influence on the second patient of family psychosis, of heredity, of anxieties, of emotional strain, of fatigue, of unfortunate affections, of diagnostic errors, the contagious nature of mania and melancholia can never be affirmed.

We may go further, he points out, and ask how such contagion can be possible. Jörger, who believes in the possibility of contagion, compares the second patient to a hypnotised subject moved by automatic imitation. Such an explanation seems unacceptable; while if, as some alienists believe, manic-depressive insanity is due to the influence on the cerebral centres of a poison circulating in the blood, the question of contagion cannot even be raised.

HAVELOCK ELLIS.

2. Clinical Psychiatry.

Un cas de confusion mentale avec délire onirique chez une albuminurique
[A Case of Mental Confusion with Dream Delirium in an Albuminuric]. (*Bull. Soc. Clin. Méd. Ment.*, Feb., 1911.) Fouque, M.

Of late years the condition of acute confusion has excited so much attention that any fresh note on the subject is of interest. It is now

generally admitted that all such cases are toxic in origin, but the mechanism of production is not always clear. This paper records the case of a woman, æt. 65, who came of an alcoholic family, but with no insane heredity. She had herself indulged to excess in drink, and six years ago became blind as the result of albuminuric retinitis. In 1908 she had a severe attack of nephritis with albumen in the urine, and became insane. Under treatment she recovered and was discharged in six months. Now, after an interval of two years, she is again in the asylum, and her condition is described by Dr. Fouque. She is a well-marked case of Bright's disease, with the usual clinical signs. Her urine contains a large amount of albumen. It is to be noted that she has had no alcohol for a considerable time. Her mental state is one of slight enfeeblement with but little loss of memory, but the most characteristic feature of her state is the degree of torpor present in association with a delirium made up of dreams and visual hallucinations. She sees and describes grotesque scenes, chiefly of an erotic nature, which are enacted before her. The chief part in her dream is played by a female dwarf, about the height of one's arm, who comes to annoy her, sometimes on foot, sometimes in a tiny carriage, with a suite of courtiers, gorgeously dressed. They all behave in the most indecent and disgusting fashion; many of them are covered with sores full of maggots. Not content with shocking her by their antics they throw worms, snakes and moths at her, which fall into her soup or coffee, making it taste bitter.

Such a condition presents many analogies with alcoholic delirium and the toxic insanities in general, and in this connection the suggestion of Spaglia that all such delirious states are brought about through the renal lesions which accompany the intoxications seems worthy of note. It certainly emphasises the importance of examining the urine in all such cases.

W. STARKEY.

Anterograde Amnesia in a General Paralytic [Amnésie de fixation chez un paralytique général]. (Bull. Soc. Clin. Méd. Ment., Jan., 1912.) Vigouroux and Prince.

Anterograde amnesia with falsification of memories is usually considered so characteristic of the polyneuritic psychosis of Korsakoff that its occurrence in a general paralytic is of interest. The patient was a man, æt. 47, who had contracted syphilis at sixteen and malaria at twenty-two. He had never indulged in alcoholic excess. His mental illness began in 1909 with headaches, dulness, and loss of memory. In 1910 he was sent to the asylum, as he had got lost in the street, and could give no account of himself. The main feature of his mental condition as noted on admission was complete loss of memory for events since the onset of his illness. He could give no account of what had happened yesterday or even an hour previous to being questioned. He was aware of his condition, and tried to remedy it by noting down dates, etc. Distant memory was good, and he could do sums, recognise objects, and reason fairly well. He, however, mistook the identity of everyone round him, taking them for people he had known outside. There was no fabulation, nor did hallucinations

develop; signs of neuritis were absent. Physical signs of general paralysis were present, and he died in convulsions after a year's residence in the asylum. *Post-mortem* his brain showed the lesions of general paralysis with, on the left side, a zone of interstitial hæmorrhage limited to the grey matter of the cortex of the external occipital convolutions.

W. STARKEY.

Automatic Parricidal Impulse in Puberty [*Impulso automatico al parricidio nell'epoca pubere*]. (*Ann. di Freniat.*, vol. xxi, fasc. 3, Sept., 1911.) Marro.

The observation recorded in this paper is of some criminological interest. The patient to whom it refers was a youth between sixteen and seventeen years of age, the son of an alcoholic father, but otherwise without special hereditary taint. When nine years old he had a severe head injury, which left a depression over the upper parietal region on the right side. After this accident the boy complained constantly of sensations of heat in the head, and he was noticed to be a good deal slower at his lessons. With the onset of puberty he became subject to periodical headaches, and he also contracted the habit of masturbation. One morning, while engaged in helping his mother in the household work, he suddenly threw a slip-noose over her head, dragged her to the ground and tried to strangle her. After a struggle lasting nearly a quarter of an hour he became quieter, sighed deeply two or three times, got very flushed in the face, went on his knees and said, "Mother, forgive me; I don't know why I did it." He then ran away, and was found some hours later in the fields. When questioned about the affair he said that the idea of the crime came into his head quite suddenly two days before. To get it out of his mind he went to a cinematograph, and was free from the obsession for a time. It recurred, however, and early in the morning of the day of the attempt he heard a voice telling him to strangle his mother with a noose, to take her money and go to the gaming-house with it. At the same time he saw a sheet of paper before his eyes with the same exhortation printed on it. The idea continued to beset him till he made the attempt. The boy was not specially fond of gambling, and he had some money of his own at this time. Discussing the case, Marro points out that the clearness of consciousness excludes the hypothesis of epileptic automatism, which might be suggested in view of the head injury and the periodic headaches. The influence of alcohol could also be ruled out. In the absence of any indications of more persistent mental disorder, the author concludes that the impulsive automatism shown by the patient was an exaggerated manifestation of the physiological instability of puberty, and he considers, therefore, that the prognosis of the case should be favourable.

W. C. SULLIVAN.

Studies on the Circulation of the Blood in the Insane [*Études sur la Circulation Sanguine des Aliénés*]. (*Bull. de la Soc. Med. de Belgique*, April, 1911.) De Somer, E.

This article is a preliminary communication on the influence which rest in bed exercises on the splanchnic vessels and also on the heart's

action. The observations are based on the changes in the three different ways which occur in the ordinary pulse-tracing, *viz.*, (1) the pulse wave; (2) the respiratory wave; (3) a wave which occurs after every five or more beats. This latter wave is the one to which importance is to be attached. It is feebly marked in healthy people, but increases in intensity in proportion to the state of dementia. There is reason to believe that this wave is a manifestation of the reactions depending on psychical activity, and has its origin in a regularly alternating cyclical contraction and dilatation of the central circulatory system.

Three cases are given with considerable detail, together with a description of the blood-waves and blood-pressure in each case.

In the case of dementia præcox there was peripheral vaso-dilatation with congested extremities. The pathogenesis of this is central in origin. After rest in bed the pulse diminishes in frequency and volume, dicrotism is less marked, and the third wave almost disappears.

In a second case with excitement it was found that rest in bed increased the dicrotism and the tension, but the third wave disappeared. In another case of dementia rest in bed greatly increased the pulse tension and tendency to dicrotism, but the third wave, which was present before bed treatment once in every twenty-three heart-beats, was found to be absent.

The writer says there is a constant relationship between the form, frequency, volume, and pressure of the pulse and the third wave. The third wave appears with any psychical activity or only a simple effort.

COLIN McDOWALL.

A Comparison of Personal Characteristics in Dementia Præcox and Manic-depressive Psychosis. (Amer. Journ. of Ins., Jan., 1912.)
Bond, E. D., and Abbot, E. S.

This research consists of a study of the personal characters of a number of cases of dementia præcox and manic-depressive insanity in the pre-psychotic period. It was undertaken to test the validity of those observers who have laid especial stress on the constitutional make-up as a factor in the development of the psychoses. Fifty definite examples of each psychosis were chosen, and a careful analysis made of the mental traits existing before the onset of the disorder.

The writers arrive at the following conclusions:

- (1) Normal traits predominate in manic-depressive psychoses.
- (2) Abnormal traits are found in about an equal proportion in dementia præcox and manic-depressive psychosis.
- (3) Certain abnormal traits—reticence, peculiarity, precosity—are found more in dementia præcox than in manic-depressive insanity.
- (4) Normal personalities are found fairly frequently in both diseases, but more frequently in manic-depressive psychosis.
- (5) Abnormal personalities are much more frequent in dementia præcox.
- (6) The "shut-in personality" is found almost exclusively in dementia præcox.
- (7) If all doubtful and abnormal personalities are conceded to pre-dispose to dementia præcox, on the one hand not more than half of

the dementia præcox cases are so predisposed, and on the other, a third of the manic-depressive cases have the same predisposition.

(8) The special "shut-in personality" is found in too small proportion to substantiate fully the claims made by some writers for its prevalence as an ætiological factor in dementia præcox.

H. DEVINE.

Differential Diagnosis between Manic-depressive Psychosis and Dementia Præcox (Journal of Nervous and Mental Diseases, Jan., 1912.)
Gordon, A.

Though the manic-depressive conception marks a step in the progress of psychiatry, it is frequently not easily differentiated from other psychoses, especially dementia præcox. With the view of illustrating the difficulty in differentiating the two types of reaction, the writer gives an account of four cases which he has been able to observe for several years.

The essential features of these cases consist in the fact that three of them commenced as forms of the manic-depressive group, and terminated as typical cases of dementia præcox, while the fourth case presented at first the clinical picture of dementia præcox for four years, and that of manic-depressive insanity for the last two years. In all these cases the earlier phases were scarcely typical in so far as the manic-depressive forms included symptoms suggestive of dementia præcox, e.g., pronounced loss of affective sentiments, and the dementia præcox case exhibited marked periods of improvement and remissions from its onset, before assuming the true manic-depressive symptoms. These observations suggest an important diagnostic point, viz., if in an individual affected with alternating outbreaks of depression and exaltation, each characteristic of melancholia and mania respectively, a change of his affective and intellectual faculties, and particularly of the first, is observed, the presumption is in favour of dementia præcox.

The writer concludes further that Kraepelin's generalisation of manic-depressive insanity tends to create a risk of including other affections under this category with a very different prognosis, and considers that further study is necessary before it can be entirely accepted.

H. DEVINE.

Melancholia and the Manic-depressive Psychosis [Mélancholie et Psychose Maniaque-dépressive]. (Rev. de Psychiat., Dec., 1911.)
Perrin, G. G.

This paper consists of a discussion of the question raised by Dreyfus that melancholia of the involutional epoch is to be regarded as belonging to the manic-depressive group of cases. The writer does not consider that the position is tenable, but regards involutional melancholia as a clear clinical entity, distinguished from the manic-depressive psychosis by the absence of any degeneration and hereditary element, by its appearance in the age of maturity, by the absence of psychic and motor inhibition, by the existence of crisis of anxiety with delusional ideas, and by a completely different mode of evolution.

H. DEVINE.

3. Pathology of Insanity.

A Reticular Condition of the Skull [État Réticulaire de la Voute Crânienne]. (Gaz. des Hôp., April, 1912.) Payan, L., and Mattei, Ch.

The subject was a female child, born at full time in normal labour, and who lived twenty-six days. There was no syphilitic heredity. An encephalocele existed in the mid-frontal region the size of an orange. Palpation showed irregularities over the whole skull, with depressions which more or less corresponded to the fontanelles. At the neck of the encephalocele there was no attempt made at ossification and the projecting tumour was soft but solid. There was in addition in the dorso-lumbar region a spina bifida, and the sacrum and coccyx was atrophied, while scoliosis existed in the cervico-dorsal region.

The *post-mortem* showed the complete absence of coccyx; the sacrum had only three foramina. The cranial wall, covered by normal skin, presented a very remarkable reticular formation. It was composed of osseous trabeculae which formed a meshwork, of which the spaces corresponded to the pseudo-fontanelles palpated during life. Irregular in outline and formation, these outgrowths were distributed over the whole vault of the skull. It was impossible to make out fontanelles or sutures. Internally this bony formation was seen to correspond to that of the outside, at the same time accentuating the normal fissures and creating others in addition.

COLIN McDOWALL.

A Combination of Chronic Idiopathic Hydrocephalus in an Adult with Syringomyelia, etc. [Ueber die Kombination eines chronischen idiopathischen Hydrocephalus eines Erwachsenen mit Syringomyelie, etc.]. (Arch. f. Psych. u. Nervenkr., vol. xlviii, No. 3.) Kreifz.

The diseases of the central nervous system which are found in combination with syringomyelia are very widely varied, and are either accidental or are ætiologically connected with this disease. Hydrocephalus may be pathologically placed next to hydromyelia and syringomyelia, and often builds the anatomical substratum for the psychical and cerebral disturbances noted in syringomyelia.

The special case described in this article is one of hydrocephalus, and the mental condition is that of mania with traces of weakness of mind, a condition very like that found in the expansive form of progressive paralysis. On *post-mortem* examination the principal findings were: idiopathic hydrocephalus, syringomyelia, and horse-shoe kidney. A thorough microscopical examination was made, but no traces of paralytic changes in the brain substance could be found. The cause of the mental condition is assigned to defective nutrition, the result of hydrocephalus. The co-existence of hydrocephalus and syringomyelia is without doubt not accidental, and can easily be explained by the fact that both affections have the same pathological cause, *viz.*, disturbances of development of the central nervous system.

The combination of a malformation of the brain (hydrocephalus) and of the spinal cord (syringomyelia) with a typical horse-shoe kidney having one pelvis and one ureter is interesting, being an association of defects probably due to an embryonal limitation of development.

HAMILTON C. MARR.

Part IV.—Notes and News.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

QUARTERLY MEETING.

THE Quarterly Meeting of the Association was held at No. 11, Chandos Street, Cavendish Square, London, on Tuesday, May 21st, 1912, Dr. William R. Dawson, President, in the Chair.

The following members were present: Drs. T. Stewart Adair, Charles Aldridge, H. T. S. Aveline, Harvey Baird, J. L. Baskin, Fletcher Beach, David Blair, C. H. Bond, David Bower, A. Helen Boyle, John F. Briscoe, R. B. Campbell, J. Carswell, James Chambers, R. H. Cole, M. A. Collins, H. Corner, Thos. Drapes, W. Norwood East, J. F. Heise Elleston, Edward Gane, Stanley A. Gill, T. Duncan Greenlees, H. E. Hayes, J. N. Higginson, R. D. Hotchkiss, David Hunter, E. M. Johnstone, Gerald Johnston, Robert Jones, Walter S. Kay, Wolseley Lewis, John R. Lord, William H. C. Macartney, H. C. MacBryan, J. H. Macdonald, R. W. Macdonald, H. J. Mackenzie, Alf. Miller, C. S. Morrison, H. Hayes Newington, H. J. Norman, J. O'Mara, L. R. Oswald, J. G. Porter Phillips, Bedford Pierce, George M. Robertson, R. Percy Smith, T. Waddelow Smith, J. G. Soutar, J. B. Spence, T. E. Knowles Stansfield, R. Stewart, J. D. Thomas, T. Seymour Tuke, Fred. Watson, D. Yellowlees.

Visitors: A. Fox, W. A. Hattie (Halifax, Canada).

Regrets at inability to be present were received from Sir T. S. Clouston, Drs. Bolton, Easterbrook, Keay, Leeper, Mercier, Middlemass, Stoddart, Thompson, Urquhart, and Outtersen Wood.

Present at the previous Council Meeting: The President (Dr. W. R. Dawson) in the Chair, Drs. Adair, Blair, Bower, Campbell, Collins, Drapes, Hotchkiss, Hunter, Lewis, McDonald, McKenzie, Miller, Hayes Newington, Phillips, Robertson, Soutar, Spence.

The minutes of the last meeting, having already been printed and circulated in the Journal, were taken as read and duly confirmed.

OBITUARY.

THE PRESIDENT said that before the meeting proceeded any further a sad duty devolved upon him; namely, to mention two former members of the Association who had passed away since the last meeting. The first of these was Sir Richard Brayn, who was well known as a Home Office expert in lunacy, and who succeeded Dr. Nicolson as Superintendent of Broadmoor. He was an old member of the Association, having joined it in the year 1881; and although he did not take a very active part in the work of it, he was frequently present at the meetings. He was sure it would be the wish of members to instruct the General Secretary to convey the condolences of the Association to the members of Sir Richard Brayn's family.

This was agreed to by the members standing in silence.

The other death was one which touched the Irish members more nearly. It was that of Dr. Cullinan, who for some years past had been Deputy-Superintendent of Richmond Asylum, which meant that he was practically Superintendent of the large branch asylum at Portrane, within the County of Dublin. He was an extremely capable officer, and a man who was looked up to by his colleagues. His death took place almost suddenly. The President said he was sure that it would be the wish of the meeting that a similar message to that concerning Sir Richard Brayn should be sent to Mrs. Cullinan.

The resolution was passed in the same manner as the previous one.

BILL FOR DEALING WITH THE FEEBLE-MINDED.

The PRESIDENT said a resolution had been sent from the Council with reference to the Bill, which was read for the first time in the House of Commons on the 17th inst., for the purpose of dealing with the feeble-minded. The resolution ran: "That the Medico-Psychological Association is strongly of opinion that the authority which will have to administer the new Feeble-Minded Persons Control Act should be constituted at once in anticipation of any amalgamation such as is contemplated in Sect. 62; and that such body, in the first instance, should consist of the Commissioners in Lunacy, with necessary additions, this principle being in strict conformity with the recommendations of the Royal Commission on the Feeble-Minded, and being already provided for in the case of Scotland by clause 67 (1) of the Bill." The Bill, as probably most members would be aware, proposed to constitute a new authority to look after the feeble-minded and the defectives. The term "defective" was taken to include an enormous number of different classes of mental defect; and some of those different classes were already dealt with in the asylums. The number was so enormous and the scope of the proposed Bill was so wide that it was evident that the appointment of a new Commission, consisting of officials who had had no experience in the administration of asylums or the care of those mentally afflicted, would be a grave mistake. And it seemed to the Council to be most important that the body which knew more about the subject than any other body in the Kingdom should be the one appointed to carry out the recommendations of the new Act, with, of course, a considerable accession of strength to its numbers. He therefore proposed that the resolution he had read, and which was recommended to the general meeting by the Council, should be passed.

Dr. HAYES NEWINGTON seconded the resolution, and for the information of the meeting he read the sections of the Act concerned in the matter. The constitution of the central authority to administer the Act was found in section 2: "For the purposes aforesaid, His Majesty, on the recommendation of the Secretary of State," etc. The object of the resolution proposed by the President was to press for the appointment of the Commissioners absolutely from the first, as the basis of the controlling authority. The Council thought that some expert knowledge must be not only useful, but absolutely requisite to bring into being this new Act, because the medical side of the Act was almost as important as the financial. One knew that there would be very great difficulties in the matter of administration, finding the money, and so on, but when all that was said and done, the principal difficulty in administering the Act for the benefit of the nation would be from the medical side, in the way of determining who should come under its beneficent operation. It was thought that it would be a serious mistake if, under this section, the original Commission should consist of comparatively inexperienced persons; and then later on, when all the mischief which might be done had arisen, for the Commissioners in Lunacy to be added to that body. The Commissioners should be the body, and others added as might be necessary. In support of that one found in Section 67, Sub-section 1, the following words: "Sections 1 and 2 shall not apply, and in lieu thereof the general Board in Lunacy for Scotland, hereinafter referred to as the Board, shall be charged with general superintendence of matters connected with the supervision and control of persons, etc." It was thought that what was good for Scotland might possibly be good for England also, and whether it was good for Scotland or not, England should have it. He considered that the resolution followed closely the recommendations of the Royal Commission on the Feeble-minded. It was well known that that body was a very weighty body, and pronounced a weighty judgment, which judgment had been respected by all people. And the Council thought that, if for no other reason, the Association ought to protest against such an important recommendation of that Commission being superseded by this Act, which was confessedly only an Act which was brought in in a form to avoid or get rid of the opposition of various bureaucratic bodies. The Bill was not that which was hoped for by psychiatrists, although it was a good Bill. He said that because the subject had been the shuttlecock between the various Government offices, the Local Government Board and so on, and they did not think such considerations should allow of the lunacy aspect of the question being put on one side. And he was glad to see that the *Times*, in its leader of the previous day,

asked the pointed question why there should be two bodies when one body, *vis.*, the Commissioners in Lunacy, could do the work admirably. Glancing through the Bill rapidly—he had a copy only that morning—he felt sure that it must be altered, as it could not be worked in its present form, because the supervision of various classes had been given to two sets of authorities. That did not appear in the Bill, but when experienced people analysed it, it would be found that in some respects the authority would be a conflicting one, and that the unfortunate members of the Association who would have to administer under the authorities would have to answer to two authorities on one matter, which was obviously wrong. He seconded the resolution, and hoped the Association would pass it.

A MEMBER asked whether the words “in the first instance” appeared in the resolution, and was answered in the affirmative. He then said he would like to propose that the words be left out.

The PRESIDENT said those words were put in because it was proposed that in the first instance the body should be a separate one, and later should be amalgamated with the controlling body. The Association wished that the Commissioners should from the first be the controlling body, and not simply be amalgamated with the controlling body later on.

Dr. BEDFORD PIERCE asked whether it would be suitable to insert, as a kind of preamble to the resolution, words expressing welcome of the measure, such as, “while cordially welcoming this Bill.” There was at present nothing in the resolution expressing approval of the Bill by the Council, but surely, as a body, they would wish to express such approval.

Dr. HAYES NEWINGTON pointed out that the resolution was being submitted to a general meeting without having first appeared on the agenda, and that was done by special permission of the Association's rules, which allowed such a resolution to be brought forward and voted upon with the consent of the Council. The Council had passed the resolution in its present form, and he did not think it would be in order for the general meeting to pass anything but that. Perhaps some of the members might not approve of it so heartily because they did not know what was in the Bill.

Dr. STANLEY GILL asked whether the standing orders could be suspended and a vote taken on it.

The PRESIDENT ruled that that could not be done.

Dr. ROBERT JONES said he considered this a most important resolution, and one which he felt should be supported by the Association. Now was the time to do so. Psychiatrists had been waiting five years for some legislation on the subject, and he thought it would be very polite on the part of the Association to express a cordial welcome of something which had come after five years of waiting. It was known, especially to Dr. Hayes Newington, that a great many children at three years of age were brought into a lunatic asylum on a lunacy certificate. Surely those came into the category of the mentally defective. If, as Dr. Newington said, there were to be two authorities, there would practically be two authorities over the same asylum, one authority responsible for the lunacy side, and the others in the body responsible for the imbecile or the weak-minded. Considering that it was very difficult to separate some cases of imbecility from cases of insanity and moral imbecility, and that one alienist would send a case to a home for mentally defective people, and another would send it to an asylum, it was most important that the control should be under one authority, and that that authority should be the Lunacy Commissioners.

The PRESIDENT read the resolution again and it was carried unanimously.

ELECTION OF CANDIDATES.

The PRESIDENT appointed Dr. Campbell and Dr. Lord as scrutineers for the ballot, and the following gentlemen were duly elected.

John Allan Munro Cameron, M.B., Ch.B.Glasg., Pathologist and Assistant Physician, Lancaster County Asylum, Whittingham, Preston. (Proposed by Drs. R. W. Watson, L. R. Oswald and Henry Carre.)

Eustace Stanley Hayes Gill, M.B., Ch.B.Liverpool, Licensee, Shaftesbury House, Formby, near Liverpool. (Proposed by Drs. Stanley A. Gill, Nathan Raw and H. Hayes Newington.)

George Yeates Cobb Hunter, Major I.M.S., M.R.C.S., L.R.C.P.Lond., 52, Redclyffe Square, Earl's Court. (Proposed by Drs. W. B. Stoddart, G. F. Barham and Bernard Hart.)

Pierce M. J. Power, L.R.C.P. & S.I., L.M., Senior Assistant Medical Officer, County Asylum, Shrewsbury. (Proposed by Drs. Daniel M. Rambaut, D. M. Cox and M. A. Collins.)

Leslie Henderson Skene, M.B., Ch.B.Edin., Assistant Medical Officer, Hartwood Asylum, Lanarkshire. (Proposed by Drs. Neil T. Kerr, G. Dunlop Robertson and Robert B. Campbell.)

Samuel Alexander Kinneir Wilson, M.D., B.Sc.Edin., M.R.C.P.Lond., Registrar, National Hospital, Queen Square, London, W.C.; 63, Wimpole Street, W. (Proposed by Drs. W. H. B. Stoddart, J. G. Porter Phillips and Ralph Brown.)

Dr. ROBERT JONES read a paper, entitled "Classification of the Various Forms of Dementia" (see p. 411). Communications on the subject by Sir THOMAS CLOUSTON and Dr. MERCIER were read by the Honorary Secretary. The following members took part in the discussion: Dr. HAYES NEWINGTON, Dr. YELLOWLEES, Dr. GEORGE M. ROBERTSON, Dr. SEYMOUR TUKE and Dr. CARSWELL.

The PRESIDENT intimated, with the permission of the meeting, that the discussion on Dr. Bernard Hart's paper, read at the previous meeting, entitled "A Case of Double Personality," and that Dr. Briscoe's paper on "Appendicitis in Asylums," would be held over until the Annual Meeting, which would be held in Gloucester.

Members afterwards dined together at the Café Monico.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

SOUTH-EASTERN DIVISION.

THE SPRING MEETING of the South-Eastern Division was held, by the courtesy of Dr. F. H. Edwards, at Camberwell House, S.E., on Tuesday, April 23rd, 1912.

Among those present were—Drs. W. R. Dawson (President), David Bower, T. Seymour Tuke, Francis H. Edwards, Fletcher Beach, R. H. Steen, J. G. Smith, H. Kerr, G. H. Johnston, R. Whittington, James Chambers, J. Percy Race, F. Watson, Ralph Brown, J. G. P. Phillips, Norman Oliver, E. S. Pasmore, R. Miller, R. J. Stilwell, A. S. Newington, Theo. B. Hyslop, Cecil Bulmore, J. D. Greenlees, P. E. Campbell, Hubert J. Norman, M. A. Collins, E. Faulks, W. Rawes, and David Hunter (Hon. Sec.).

The visitors included the Rev. Philip S. O'Brien, D.D. (Chaplain) and Drs. F. W. Bartlett and W. L. Holyoak.

The house and grounds were inspected, and at 1.30 p.m. Dr. Edwards entertained the members to luncheon. At the close of the lunch the PRESIDENT proposed a vote of thanks to Dr. Edwards for his kindness in so hospitably receiving the Division and Dr. EDWARDS responded.

The meeting of the Divisional Committee was at 2.15 p.m., Drs. Greenlees, Pasmore, Phillips and Hunter being present.

The General Meeting was held at 3 p.m., the President in the Chair.

The minutes of the last meeting having been printed in the Journal were taken as read and confirmed.

The following members were elected to take office for 1912-1913:

Hon. Sec. of the Division, Dr. David Hunter; representative members of the Division on the Council: Drs. David Bower, John Brander, Frederick R. P. Taylor, and David G. Thomson.

The following gentlemen were elected Ordinary Members of the Association:

Charles J. Fox, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, Middlesex County Asylum, Napsbury, St. Albans. (Proposed by Drs. T. O'C. Donelan, F. Bodvel Roberts and D. Hunter.)

Herbert M. Berncastle, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer

Croydon Mental Hospital, Warlingham, Surrey. (Proposed by Drs. E. S. Pasmore, L. F. Hanbury and D. Hunter.)

William Bertram Hill, M.D., B.C.Vict., Assistant Medical Officer and Pathologist, Croydon Mental Hospital, Warlingham, Surrey. (Proposed by Drs. E. S. Pasmore, L. F. Hanbury and D. Hunter.)

Walter L. Holyoak, M.D., B.S.Lond., Assistant Medical Officer, Camberwell House, S.E. (Proposed by Drs. F. H. Edwards, H. J. Norman and D. Hunter.)

John James McIntosh Shaw, M.A., M.B., Ch.B.Edin., Assistant Medical Officer, London County Asylum, Bexley, Kent. (Proposed by Drs. T. E. K. Stansfield, E. Faulks and G. Evans.)

Drs. Kerr, Johnston and Harper-Smith were elected members of the South Eastern Divisional Committee of Management, which now consists of the following :

Retire in 1913 : Drs. Baily, Haynes and Donelan.

Retire in 1914 : Drs. Stansfield, Dove and Phillips.

Retire in 1915 : Drs. Kerr, Johnston and Harper-Smith.

The invitation of Dr. Turner to hold the Autumn Meeting at the Essex County Asylum, Brentwood, was unanimously accepted with much pleasure. October 1st, 1912, was fixed as the date of this meeting. The date of the Spring Meeting was fixed for April 29th, 1913.

CONTRIBUTIONS.

Dr. HUBERT J. NORMAN gave an abstract of his paper entitled "Emanuel Swedenborg : Psychologist" (see p. 448).

In the discussion which followed, the PRESIDENT congratulated Dr. Norman on the highly interesting *resumé* of his work, and complimented him on the clear grasp of his subject shown by the epitome.

Dr. GREENLEES expressed his appreciation of Dr. Norman's paper, and remarked that he was deeply impressed with the fact, clearly shown, that Swedenborg was much ahead of his time in his grasp of psychology. The fact that he ultimately became insane did not, in his opinion, detract from the value and interest of his earlier work.

The Rev. Dr. O'BRIEN said he considered it a rare privilege to sit at the feet of the doctors. Dr. Norman's presentation of a difficult and abstruse subject was characterised by delicacy, ability and tact. For a young man he had, indeed, displayed the wisdom of the age. He himself had always regarded Swedenborg as having lost his wits at an earlier stage of his career, judging by his preposterous endeavour to localise the immortal soul in the material body. It would be a great source of grief to all who believed in a future life if it should ever be accepted that God, the great Creator, should have taken the trouble to locate the soul of man in his stomach, brain or any other part of his material structure.

Dr. NORMAN, in his reply, said that Swedenborg's idea in trying to localise the soul was only part and parcel of his desire to take nothing for granted, and that he had admitted that his search had been fruitless.

Dr. EDGAR FAULKS read a paper upon "The Problem of Enteric Fever in Asylums, with Special Reference to the Treatment of Carriers."

The PRESIDENT said that the subject of the paper was of great interest and importance to asylum physicians. He gave some details of a severe epidemic of enteric fever in an Irish asylum, traced to the water supply. One of the difficulties in connection with the subject was the problem of what to do with the carrier when he has been identified.

Dr. EDWARDS remarked that in the case not only of enteric fever, but also of dysentery, it was an interesting fact that these diseases were almost unknown in private asylums. This suggested some special source of infection, and a factor he considered important was the diet. For instance, patients in private asylums were much less liable to have food brought to them from outside by their friends. The diet appeared to him to be the only possible explanation, because, at any rate in modern public asylums where such cases occur, the drainage, water supply and general hygienic conditions were above reproach, whereas in some private asylums in comparatively recent years the drainage has been found to be defective and in spite of that fact no typhoid or dysentery occurred.

Drs. HOLYOAK, PASMORE, BRANDER and COLLINS also discussed the paper, and Dr. FAULKES replied.

Dr. GREENLEES proposed and Dr. EDWARDS seconded a vote of thanks to the President for occupying the chair. This was unanimously and heartily carried.

After the meeting Mrs. Edwards kindly entertained the members to tea.

In the evening the members dined together at the Café Monico.

SOUTH-WESTERN DIVISION.

THE SPRING MEETING was held, by the kindness of Mrs. Fox, at Brislington House, near Bristol, on Thursday, April 18th, 1912. The President of the Association (Dr. W. R. Dawson) was in the chair.

The following members were present: Drs. Aveline, Bullen, Bazalgette, Barton-White, Lavers, Morton, Marnan, MacBryan, Nelis, Rutherford, Soutar, Smyth, Scott Williamson, and the Hon. Divisional Secretary (Dr. Blachford).

There were also present, as visitors, Sir George Savage, Drs. Shingleton Smith, Phillips, and Smith.

Letters of regret for non-attendance were read from Drs. MacDonald, Morrison, and Monnington.

The minutes of the last meeting were read and signed.

Dr. Blachford was re-appointed Hon. Divisional Secretary, and Drs. Aveline and Nelis elected Representative Members on the Council. Drs. Morrison and Nelis were elected Members of the Committee of Management.

The following were elected Members of the Association:

Dr. William Brown, M.D., C.M., District Medical Officer, Adviser in Lunacy Cases to Bristol Magistrates, Park View, Fishponds, Bristol. (Proposed by Drs. Blachford, Aveline, and Bazalgette.)

Dr. Joseph D. Burke, M.B., B.Ch., R.U.I., Assistant Medical Officer Somerset and Bath Asylum, Cotford, near Taunton. (Proposed by Drs. Aveline, Graham, and Blachford.)

Dr. William Boyd, M.B., Ch.B., B.A.O.(Belfast), Third Assistant Medical Officer, Cornwall County Asylum, Bodmin. (Proposed by Drs. Rivers, Dudley, and Phillips.)

The date of the Autumn Meeting was fixed for Thursday, October 24th next, at Laverstock House, Salisbury, on the invitation of Dr. Monnington.

The date of the Spring Meeting was fixed for April 17th, 1913.

Sir GEORGE SAVAGE then gave his paper on "Some Dreams and their Significance" (see p. 407).

This was followed by an interesting discussion, in which the PRESIDENT, Drs. SOUTAR and SHINGLETON SMITH took part.

The report of the Sub-committee appointed to deal with the question of a Central Pathological Laboratory was read and discussed, and it was decided to adopt the report and to ask the Sub-committee to make further inquiry as to the legality of one of the recommendations contained therein.

The meeting terminated with a hearty vote of thanks to Mrs. Fox.

The members afterwards dined together at St. Stephen's Restaurant, Bristol.

NORTHERN AND MIDLAND DIVISION.

THE SPRING MEETING of the Northern and Midland Division was held at the kind invitation of Dr. Farquharson at the Garlands Asylum, Carlisle, on Thursday, April 18th, 1912.

Dr. W. F. Farquharson presided.

The following eleven members were present: Drs. J. R. S. Anderson, W. F. Farquharson, C. H. G. Lyall, T. W. McDowall, H. J. Mackenzie, H. D. MacPhail, J. Middlemass, T. J. S. Moffit, J. Parker, B. Pierce, T. S. Adair, and two visitors, Rev. E. S. Pole and Dr. C. W. Donald.

The minutes of the last meeting were read and confirmed.

Dr. T. Stewart Adair was re-elected Secretary to the Division.

Dr. J. Middlemass and Dr. J. H. MacKenzie were elected Representative Members of Council for the Division for the ensuing twelve months.

The kind invitations of Dr. Johnston to hold the Autumn Meeting, 1912, at Bracebridge Asylum, Lincoln, and of Dr. Cassidy to hold the Spring Meeting, 1913, at the County Asylum, Lancaster, were accepted, and it was left to the Secretary to fix the dates.

Dr. BEDFORD PIERCE referred to the sub-committee which had been formed to inquire into the "Status of British Psychiatry and of Medical Officers," and said that the Secretary, Dr. Bernard Hart, would welcome any suggestions with regard to the subject, and he hoped that any members who had views would write to Dr. Hart in order that the matter might be freely ventilated.

Dr. J. R. S. ANDERSON read an interesting paper on "Insomnia." He dealt with the various causes of the condition, and especially its relationship to the insane. He then considered the various drugs that were in use for producing sleep, and the methods of treatment that might be beneficial. Dr. FARQUHARSON, Dr. McDOWALL and others spoke on the paper, and a suggestion was put forward that a collective investigation on the use of sedatives in certain classes of cases might be attempted by the Association.

Dr. T. W. McDOWALL read a paper written jointly by himself and Dr. COLIN McDOWALL on "Abnormal Development of Scalp" (see p. 398).

Dr. PARKER read a paper entitled "Observations on a Case of Dementia Præcox" (see p. 483).

The meeting was brought to a close by a hearty vote of thanks to Dr. Farquharson for his kind hospitality.

IRISH DIVISION.

THE SPRING MEETING of the Irish Division was held on Thursday, April 18th, at the Stewart Institution. Dr. Hetherington was voted to the Chair, and there were also present Dr. Mayne Courtney, Dr. Nolan, Dr. Plumer, Dr. Drapes, Dr. Oakshott, Dr. Lawless, Dr. Greene, Dr. Mills, Dr. Rainsford, and Dr. Leeper, Divisional Secretary.

The minutes of the previous meeting were read and signed.

Before the other business of the meeting was proceeded with it was proposed by Dr. Nolan and seconded by Dr. Drapes—"That we, the members of the Irish Division of the Medico-Psychological Association of Great Britain and Ireland, tender to Mrs. Henry Cullinan the expression of our deepest sympathy with her in her sad bereavement, and desire to place on record the sense of the loss the Branch has sustained by the death of Dr. Henry Cullinan."

The resolution was unanimously passed in silence, the members standing in their places.

A cordial invitation was given to the Division to hold their Summer Meeting at Londonderry by the courtesy of Dr. Hetherington, and the date was unanimously fixed upon for July 2nd subject to the approval of the President.

The date of the Autumn Meeting was fixed for Thursday, November 25th, the date of the Spring Meeting April 17th, 1913, and the Summer Meeting of next year to be held on July 8th, 1913.

On a ballot being taken the scrutineers reported that Dr. Leeper was unanimously elected Hon. Secretary to the Division and Drs. Nolan and Drapes representative members of Council.

Dr. Cecil Rutherford, M.B., B.Ch., Assistant Medical Officer, St. Patrick's Hospital and St. Edmondsbury, and Dr. Vivian Wallace, L.R.C.P. & S.S., Junior Assistant Medical Officer, Mullingar Asylum, having been proposed and seconded and balloted for, were declared to be unanimously elected as ordinary members.

Dr. NOLAN explained the recent developments as regards the Asylum Officers' Superannuation Bills now before Parliament, and the differences that existed between Lord Wolmer's Bill and that recently introduced by Sir Charles Nicholson. The Chairman expressed the thanks of the meeting for Dr. Nolan's clear explanation, and after much discussion and some adverse criticism of those

who in Scotland and elsewhere opposed the measure, it was proposed by Dr. Lawless and seconded by Dr. Oakshott, and passed unanimously—"That the Irish Division of the Medico-Psychological Association is of opinion that in computing the rate of pension for the staffs of Irish asylums the pension should be computed at a rate of one-fortieth instead of one-fiftieth as at present, inasmuch as the pay of the staff is lower in Ireland than in England and Scotland, while the contribution rate is the same." Copies of the resolution were ordered to be sent to Lord Wolmer, Sir Charles Nicholson, Mr. William Redmond, Mr. Nanetti, Mr. Hayder, and Dr. Shuttleworth.

Dr. MILLS, of Ballinasloe, made a statement to the Division, by permission of the Chairman, regarding a complaint which had recently been made by several medical men in his district to the Asylum Committee to the effect that he had engaged in private practice contrary to the conditions of his appointment. Dr. Mills said that he wished to bring the matter before the meeting, and to explain to the members of the Association his action in the matter complained of.

The members present fully discussed the points raised, and accepted the explanation given by Dr. Mills, and the Chairman desired to express to him the sympathy of the members in the trouble he had been caused.

Dr. RAINSFORD read a paper entitled "Some Cases of Medico-Legal Interest" (see p. 476), which led to an interesting discussion.

Dr. HETHERINGTON expressed his appreciation of the communication, and said that it should prove helpful to medical men in dealing with these difficult cases.

Dr. J. MAZERE COURTNEY thought that none of the cases mentioned by Dr. Rainsford could be classed as insane; they were, however, most interesting psychological studies. He doubted if at any time laws would be enacted to deal comprehensively with all of these cases owing to the extreme difficulty of classification.

Dr. NOLAN considered that no law could ever be formulated to meet these cases of moral depravity, and mentioned the case of a learned judge who harboured an escaped paranoid in his house, and was so impressed with the exaggerated delusions of persecution from which the patient suffered that he refused to allow of his being sent back to the asylum from which he had escaped. Dr. Nolan was much struck by this incident, as showing that judges' personalities must have a great weight in dealing with individual cases such as Dr. Rainsford had described.

Dr. GREENE said that it seemed a great pity medical assessors were not appointed in these cases, as in the Workmen's Compensation Act, to sit with the judge and assist him in dealing with these most difficult matters, and strongly condemned the practice of giving evidence as it exists.

Dr. DRAPES approved of Dr. Greene's suggestion, and wished to point out the all-importance of this personal equation of judge and jury in dealing with these cases which led to so many inconsistent verdicts.

Dr. LEEPER also spoke, and referred to the history of the British law regarding criminal responsibility, and alluded to its uncertainties and nebulousness.

Dr. RAINSFORD having thanked the meeting for their kind reception of his paper, replied to the various points raised by those who had joined in the discussion.

The CHAIRMAN proposed a vote of thanks to Dr. Rainsford for his kindness and hospitality in entertaining the Division, and for the pleasant day they had spent, which was passed unanimously, and the proceedings terminated.

CORRESPONDENCE.

To the Editors of the JOURNAL OF MENTAL SCIENCE.

DEAR SIRS,—I should like to say, on my own behalf, in reference to Dr. Mercier's vigorous defence of the British School of Psychiatry in your April number, that I think my friend has put his views in too strong language, so that his motive is liable to be misunderstood, both in regard to Dr. Turner and especially in regard to Prof. Kraepelin and the other continental authors referred to. I cannot think that the word "plagiarist" is compatible with international amity or scientific

courtesy. All science is, or should be, cosmopolitan. International jealousy or ill-feeling is out of place in regard to it, and we who know Dr. Mercier best realise that he is incapable of this attitude, but he feels keenly and hits hard. Prof. Kraepelin's work in psychiatry and that of his great continental *confrères* has put mankind under a deep debt of gratitude to them. They may not have recognised or acknowledged our British work so fully as fairness and knowledge should have dictated, and I may feel strongly that my "Adolescent Insanity" and the physiological and clinical basis on which it rests has not been sufficiently recognised, but I know that *magna est veritas et prævalebit*. Dr. Mercier's chivalrous vindication of our priority will be much valued and appreciated, but his patriotic loyalty and his joy of battle have driven him into the use of a somewhat too sharp dialectic.

I am, etc.,

T. S. CLOUSTON.

26, Heriot Row,
Edinburgh.

June 25th, 1912.

THE LIBRARY OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Library is open daily for reading, and for the purpose of borrowing books. Books may also be borrowed by post, provided that at the time of application threepence in stamps is forwarded to defray the cost of postage. Arrangements have been made with Messrs. Lewis to enable the Association to obtain books from the lending library belonging to that firm should any desired book not be in the Association's Library.

The following work has been presented to the Library by the author:

J. Larned.—*Life and Work of William Pryor Letchworth*.

A large number of books have been bound, including a complete set of the Commissioners' Reports.

The Council has acceded to the request of the Library Committee that the book-cases at present in the Library should be provided with glass doors, and this much-needed improvement is now being proceeded with. A similar alteration is being made in the cupboards in the additional room recently acquired by the Association.

Application for books should be addressed to the Resident Librarian, Medico-Psychological Association, 11, Chandos Street, Cavendish Square, W. Other communications should be addressed to the undersigned at Northumberland House, Green Lanes, Finsbury Park, London, N.

BERNARD HART,

Hon. Secretary Library Committee.

NOTICES OF MEETINGS.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

The seventy-first Annual Meeting of the Association will be held on Thursday and Friday, July 11th and 12th, 1912, at Gloucester, under the Presidency of Dr. James Greig Soutar.

On Wednesday, July 10th, there will be meetings at the Guildhall as follows: Parliamentary Committee at 2 p.m.; Educational Committee at 3.30 p.m.

Inspection of Gloucester Asylums.—During Wednesday the Gloucester County Asylums (at Wotton and Barnwood) and Barnwood House will be available for inspection between 11 a.m. and 12.30 p.m., or 3 p.m. and 5 p.m., or at other times or days by arrangement.

The Hucclecote tram-car passes within a short distance of the County Asylum at Wotton, within $\frac{1}{4}$ mile of the second County Asylum at Barnwood, and past the entrance to Barnwood House.

On Thursday, July 11th, the Council will meet at 9.30 a.m.

The Annual Meeting will commence at 11 a.m. on Thursday, July 11th, at the Guildhall, when the usual business of the Association will be transacted.

2 p.m.—The President's Address, after which the following papers will be read:

JOHN FREDERICK BRISCOE, M.R.C.S. on "Appendicitis in Asylums."

McKINLEY REID, M.B., Ch.B. on "Bacteriology of Forty Cases of Diarrhœa,

with Special Reference to Asylum Dysentery." Adjourned discussion of Dr.

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BERNARD HART's paper: "A Case of Double Personality" (*Journal of Mental Science*, April, 1912).

Friday, July 12th, at 9.30 a.m.—A discussion on Mental Deficiency will be opened by Dr. THEO. HYSLOP, in which it is hoped some lay people interested will speak. Will those willing to join in the discussion kindly let the General Secretary know at an early date.

4 to 7 p.m.—The Committee of Barnwood House and Dr. and Mrs. Soutar kindly invite Members and Ladies accompanying them to a Garden Party and Pastoral Play ("The Fantastics," by Edmond Rostand) at Barnwood House.

Saturday, July 13th.—Excursion to Berkeley Castle and Church. Train leaves Gloucester (Midland) 10.45 a.m. Luncheon at Berkeley Arms at 1.30. Return train to Gloucester from Berkeley 3.15, arriving Gloucester 4.5 p.m. Tickets for Excursion including Luncheon and all charges price 6s. 8d., to be obtained from Messrs. Thos. Cook & Son, The Cross, Gloucester, *not later than Thursday, July 11th*. It is advisable to engage rooms early. Convenient hotels are: "The Bell," "Wellington," and "New Inn."

Arrangement for Ladies.—Thursday, July 11th.—11 a.m.—The very Rev. the Dean of Gloucester has kindly consented to show a party round the Cathedral. (Any Members of the Association not otherwise engaged may join this party.)

1.15 p.m.—Mrs. Soutar invites the ladies to luncheon at Barnwood House, and after luncheon to a drive on the Cotswolds and tea.

Friday, July 12th.—In the morning, visit to Cheltenham or local places of interest. (Arrangements can be made on previous day.)

The Annual Dinner will take place on Thursday, July 11th, at The Guildhall, at 7.0 for 7.30 p.m.

It will greatly facilitate the making of necessary arrangements, especially in regard to seating, if members will kindly signify at an early date to the General Secretary their intention of dining.

No liability is incurred by announcing the intention to dine, if later on a member finds he cannot attend; and, further, if no notice has been given, a member can still signify his intention of dining or attend without giving notice. *But, a letter or telegram addressed to the Treasurer at the Bell Hotel will greatly assist.*

The charge for Dinner Tickets (wines included) will be One Guinea, and payment should be made, either by cheque or in cash to the Treasurer, who will supply a voucher.

South-Eastern Division.—The Autumn Meeting will be held, at the invitation of Dr. John Turner and by the courtesy of the Visiting Committee, at the Essex County Asylum, Brentwood, on Tuesday, October 1st, 1912.

South-Western Division.—The Autumn Meeting will be held, by the courtesy of Dr. Monnington, at Larnstock House, Salisbury, on Thursday, October 24th, 1912.

Northern and Midland Division.—The Autumn Meeting will be held, at the invitation of Dr. Johnston and by the courtesy of the Asylum Committee, at Bracebridge Asylum, Lincoln, on Thursday, October 24th, 1912.

Scottish Division.—The Autumn Meeting will be held on Friday, November 15th, 1912.

Irish Division.—The Autumn Meeting will be held on Thursday, November 7th, 1912.

APPOINTMENTS.

Greene, Nolan James Noël, M.B., B.Ch., B.A.O., A.B. Dublin University, L. M. Rotunda, Assistant Medical Officer to the East Sussex County Asylum, Hellingley.

Lothian, Norman V. C., B.Sc., M.B., Ch.B. Glas., Second Assistant Medical Officer to the Stirlingshire District Asylum, Larbert.

Perdrau, Jean René, M.B., B.S. Lond., M.R.C.S., L.R.C.P. Lond., Junior Assistant Medical Officer and Pathologist to the County Asylum, Herrison, Dorchester.

Russell, D. H., M.B., Ch.B. Edin., Second Assistant Medical Officer to the County Asylum, Herrison, Dorchester.

Wooster, F. C., M.B. Syd., Junior Assistant Medical Officer, Department of Lunacy, New South Wales.

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Part I.—Original Articles.

The Presidential Address, delivered at the Seventy-first Annual Meeting of the Medico-Psychological Association, held at Gloucester on July 11th and 12th, 1912. By JAMES GREIG SOUTAR, M.B.

LADIES AND GENTLEMEN,—By your choice I find myself in an honourable position to which in no flight of imagination had I ever aspired. A cautious habit of limiting aspiration by what seems to be the attainable has no doubt saved me from many a disappointment; now it affords me a surprise in a form which to all men is ever the most gratifying—an expression of good-will from those whose opinion is valued most highly, one's comrades and colleagues.

I thank you for the honour you have done me in making me your President for the year. I accept the trust, not because I have discovered in myself fitness for all the duties of the office, but because I take my election as a declaration from you that while you always require from your Presidents loyal and assiduous attention to the business and interests of our Association, you are prepared, on occasion, to dispense with the erudition and the enlightenment which have distinguished so many occupants of this chair. As far as the ordinary qualities will carry me I hope not to fail you, but, on the very threshold of my career, I long in vain for the gifts which are necessary to produce an address such as we have listened to on these

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occasions—the address which marks a definite forward movement, arresting attention, clarifying thought, compelling conviction.

My first duty, to me a most pleasant one, is to welcome you to Gloucestershire. It does not offer the type of attraction which has stirred your interest in the capital cities and in the great seats of industry where, of late years, we have been wont to meet. It has, however, in its far-stretching lines of hills, its well-wooded valleys, its rich pasture lands, much delight for the lover of natural beauty, and to him who can visualise the past, who would catch the echoes of the mighty movements which have moulded the nation, it makes a strong appeal. In this western shire race after race, before we were welded into a nation, struggled for possession of its soil, and more than once in the later days of civil strife the last decisive battle of the campaign was fought within its borders and marked an epoch in our history (Tewkesbury, 1471, and Stow-on-the-Wold, 1646). Parliaments assembled in this city initiated principles of Government which have been amongst the most potent factors in securing our rights to justice and our freedom from tyrannical exaction (Statutes of Gloucester, 1278, and the control of the Commons over public expenditure, 1378 and 1407).

In town, and village, and hamlet, and where is now a lone country-side, stand abbey and church, some ruined, some lovingly preserved, to speak to us of that Spirit which, in spite of the frailties of systems, has, through all ages, moved men to their highest conceptions—their finest efforts.

Gloucester was a city of pilgrimages. To-day you, who have gathered here from east and west, and north and south, are maintaining this tradition. Seventy-one years ago, on the 27th of this month, six men, two from Gloucester, one from Lancaster, one from Nottingham, one from York, and one from Oxford, met at the Gloucester County Asylum and founded the “ Association of Medical Officers of Hospitals for the Insane ”—the name by which, in the days of its infancy, our Association was known. We meet here at our birthplace, thankful that, with the passing years, our capacity for usefulness has increased in many ways, but conscious of the fact that the purpose of our being, as originally formulated, “ the improvement in the treatment of the insane and the acquirement of more extensive

and more correct knowledge of insanity," still leaves scope for our most strenuous and diversified efforts.

Of those who have laboured to fulfil this purpose there have passed away during the last year Drs. Blandford, Murray Lindsay, Elliot, J. F. Sutherland, Cullinan, and Sir Richard Brayn.

Of these, some were veterans, perhaps rather weary with the long march; others were still in the full flush of their vigour, but all had that claim upon the friendship and affection of some of us by which, more than by anything else, we always measure our loss. The year which has gone has been marked, too, by some personal events which have given us cause to rejoice. We have seen our long-established appreciation of Sir Thomas Clouston and Sir George Savage graciously recognised by the Sovereign, and the capacity of Dr. Bond, proved in so many directions, secured for high office in the service of the State.

Another event upon which we see reason for congratulation is the addition to the numerical strength of the Lunacy Commission. That was a long desired act of justice to those whose work on behalf of the insane has been a marvel of thoroughness to all who have been in a position to realise the burden of duties which is laid upon them.

In passing from these personal matters my difficulties begin. I recognise that I can bring you no fresh findings from the laboratory, no illuminating generalisation from the wards, no new theory to replace the old, which has had holes knocked in it by collision with rugged facts, and no views on classification—for which, no doubt, you are thankful—except that the more detailed it becomes the greater seems to be the practical difficulty in pigeon-holing cases. I shall, therefore, confine such observations as I have to make to some comments upon two phases of thought—well, perhaps hardly that—drifts of opinion, two drifts of opinion which seem to me to be circling amongst us at present.

The first is that our continental brethren are outstripping us in the study and practice of psychiatry. This is the sort of story which, passing from mouth to mouth, is apt to become a settled and disheartening conviction. I think that its validity might be profitably examined on broad and general grounds. Sir Thomas Clouston, in that fascinating and suggestive book, *The*

Hygiene of Mind, puts before us clearly and forcibly the width of the range of study upon which depends the understanding of the human mind. He writes: "Unsoundness, inefficiency, or weakness of mind may have to do with factors which ordinary preventive medicine has hitherto only touched lightly. Such factors are modes of education, social customs, human feelings, passions, morals, and religion. The man who writes about preventive medicine in the ordinary sense must know something of physics, chemistry, physiology, medicine, bacteriology, and laboratory work. The man who writes about mental hygiene must, in addition, have a special acquaintance with brain structure and function, and must take into special account mental evolution, heredity, psychology, ethics, education, sociology, and the religious instincts. It implies also a special study of mental disease and derangements and the modes of dealing with them. Perhaps even more than a study of fully developed mental disease, it needs a knowledge of those innumerable mental eccentricities, stupidities, lethargies, impracticabilities, losses of control, obsessions, impulses, asocialisms, perversion of feeling, morbid laziness, and all such mental and moral abnormalities as fall short of actual insanity" (*The Hygiene of Mind*, p. 2).

He then asks the question: "Who is sufficient for these things?" The answer to that question is: No person, no people, no period. Knowledge has come, is coming, and will come by small accumulations, the offerings of many minds from far and near, each according to opportunities and predilection, but all precious if bearing on the supreme problem which confronts each of us as physicians: "So to learn the facts and laws of life, in both health and disease, as to utilise his knowledge in every way, and to the highest degree, for his fellow men" (*The Facts and Laws of Life*, Sir J. Russell Reynolds).

At present I hesitate to believe that, as a nation, we are laggards in this far-flung field of thought and endeavour which psychiatry embraces. When the reckoning is made there will, I venture to say, be found with the valued and welcomed contributions in foreign coin, bits of British gold bearing dates of our own times, of days that are gone, of the days yet to come.

The moral and intellectual tribute which each people pays to

progress has its national characteristics. It has ingrained in it the peculiarities of the organised society of which it is an expression. It is the inevitable outcome of far distant and immediate formative influences. It is pregnant with that spirit of a race which gives special bent to its ideas and direction to its energies. In the very diversity of this spirit lies the hope of man's ultimate conquest over the problems which beset him. The assault on ignorance is made on every side and by an infinite variety of means—means, as I have indicated, which are dictated to each people by its dominant characteristics. Of our own race Leslie Stephen, in his *History of English Thought in the Eighteenth Century*, says: "The strong point of the English mind is its vigorous grasp of facts . . . they have been slow to construct or to accept systems, however elaborately organised, which cannot be constantly interpreted into definite statements and checked by comparison with facts." Do those who bewail our supposed backwardness in all that concerns the study of mind forget that it is the value, not the similarity of the offering which matters? If we be open to suggestion, theory, hypothesis, speculation, whencesoever they come, and be ready to endeavour to interpret them into definite statement and check them by comparison with facts, we are true to our national characteristics, and we take our indispensable place in the science which we serve. "Science," says Huxley, "has need of servants of very different qualifications; of artistic constructors no less than men of business; of people to design her palaces, and of others to see that the materials are sound and well fitted together; of some to spur investigators, and of others to keep their heads cool" (Huxley, *Scientific Memoirs*). We are in a sad state indeed if it can be shown that we in this country serve psychiatry in none of those ways. I take leave to doubt, however, if it can be shown that we are out-distanced by any in our practical application of knowledge to the treatment or care of the insane, or that we are not busily and effectively engaged in endeavouring to formulate measures which, under the actual conditions and circumstances of our modern life, can be applied, with a reasonable sense of the probabilities of things, to diminish the incidence of some forms of mental disorder.

To those who are inclined to be pessimistic as to what has been done in other directions for British psychiatry I recom-

mend the perusal of the historical part of Clouston's article "The Diploma in Psychiatry" in the April number of our Journal for 1911. "We have," he says, "in the half century advanced all along the line in our original research work—the core of the matter after all—in our literature, in our teaching." And he gives chapter and verse in proof of that progress in which he himself has played so distinguished and so inspiring a part. The last volume of our Journal and other recent publications bear testimony to the fact that we have amongst our members a large number of men who are pursuing investigations along the lines of anatomical, physiological, pathological, chemical and clinical research, interrogating the function of every organ of the body, stimulated thereto by the suggestion that in many cases the wreck of mind is but a manifestation of antecedent faults in metabolism which may be found to be remediable or avoidable. I, personally, see no reason to believe that the riddle of mind, either sound or unsound, if solvable at all, is to be completely solved by these means. There is, I somehow feel, a delusive fascination in the very simplicity of such suggestions as that mental disorder is due to the circumstance that "the assimilation of anabolic substances is suspended and the accumulation of catabolic products increases" (Tanzi, p. 43); that "predispositions are dependent upon constitutional anomalies of metabolism" (Tanzi, p. 55); that "it is not improbable that the cause of such a predisposition lies in a special form of imperfect balance of metabolism" (Tanzi, p. 62). Although much research has been made on those lines both abroad and at home, there is really very little to show in the way of positive findings to support such speculation. This may be urged by some as a reason for increasing the facilities for research. It should not discourage further investigation, but I do not think that it is enough with which to approach the State or the public in any corporate capacity with a request for financial assistance for the support of such research. We must be prepared to show that what has been done by a large number of competent workers holds out substantial promise of effecting one or other or both of the great objects in view—the cure and the prevention of mental disorder. It would be hopeless in this country to go to any public department and ask for the expenditure of money merely to gratify that zeal for inquiry which is characteristic of the

scientific mind. Such a request would be met by the truly scientific question—not What are your theories, your hypotheses, your speculations, your hopes? but upon what ascertained facts do you base them? If we are prepared to show that what has been done is justified by its practical utility, if we can demonstrate that laboratory and clinic have furnished knowledge which makes for the mental health of the people, our case is won. We then shall have ranged on our side, insistent in support of our claim, not only the intellect of the nation, but that mighty force—the humanitarian instinct, which counts amongst its many victories for civilisation the rescue of the insane from the dominion of superstitious belief and of barbarous practice.

When the State or the community becomes the pay-master it will insist, as it rightly may, that the work done is such that it can be transmuted into utilitarian benefits. Have we reached the stage in research in psychiatry when we can promise these? Are we not as yet rather inspired by hopes than supported by assurances which we can formulate to ourselves or submit to others in a concrete and convincing way? The dead hopes of past times are as well known to the intelligent laity as they are to us, and we must show that the bantling which we offer for adoption has in it real promise of a vigorous and useful manhood to secure acceptance by, and support from, the community. Public health, including the last big movement to combat tubercular disease and tropical medicine, established their claim to public recognition and support in this country only when individual investigators demonstrated their ability to stay and prevent disease and thus add to the safety and stability of organised society. The results of their investigations had been “interpreted into definite statements and checked by comparison with facts.”

It must not be taken as remissness, as indifference to the importance of the subject, as want of sympathy with research or as failure in the desire to promote treatment, that we do not possess institutions like the highly equipped State-supported clinics and research laboratories which have existed for many years elsewhere. That we do not possess such institutions must rather be taken as showing that their advocates amongst us have not, as yet, made incontrovertible the contention that the sum of benefits derived from them is either in practice or in

realisable promise commensurate with the financial burden which their establishment and their maintenance would entail. It has to be remembered that what the community is ready to appreciate and to pay for is not knowledge generally, but that knowledge which can be assimilated and materialised in action. By every sign their eagerness for such knowledge is not diminished, nor is the munificence of their support abated.

The other drift of opinion upon which I should like to say a few words is that which seems to be gathering round the diploma in psychiatry. It is altogether good that further opportunities should be afforded for study under competent teachers. It cannot be hoped to include in the syllabus of training the sweeping range of knowledge which bears upon all the circumstances and conditions which make and mar the mind. To give direction to effort it has been necessary to select from a host of subjects, probably of equal importance, certain lines of study which alone shall lead to the diploma, but we must, I think, free our minds from the idea that these are the only lines which shall lead to effective and successful work in our branch of medical practice. Many men will as solitary pioneers continue to fight their way through the thicket of problems which besets them. A multitude of paths will be pursued, some sunny and seductive, which end in the quagmire of error, but some will lead to little plots and patches whence are brought back goodly things fit for the adornment of the slowly growing temple of knowledge. Others, too—and that the vast majority—will continue to labour in the plains. They are the general practitioners of our branch who dread rather than desire the title of specialist, who recognise that we are linked up to the whole range of medical and social activities, who are fully able to appreciate but not to pursue research, who are deft in the practical application of knowledge to those to whom they minister, and who, withal, have learned in the school of intimate experience that the mind diseased is not always to be wholly comprehended by chemical analysis or microscopic investigation—that the balm which helps or heals often has no place in any published system of therapeutics.

In my opinion an altogether false value is attached to the possession of the diploma if it be supposed that those who wear the badge of the drilled company which we propose to establish will monopolise either fruitful suggestion which makes for pro-

gress or the material benefits which a career in psychiatry offers. I cannot agree that without the diploma "no one can aspire to lunacy work or appointments" (Dr. D. E. Thomson, "The Teaching of Psychiatry," *Journal of Mental Science*, July, 1908), that "it will become essential for those who are candidates for the higher appointments" (Clouston, "The Diploma in Psychiatry," *Journal of Mental Science*, April, 1911), or that "no man will hereafter venture to set up as a consultant in mental diseases except he has this diploma" (*ibid.*). Nor do I think that the possession of the diploma will be the influence which will operate to secure for assistant medical officers higher salaries or that somewhat vague thing, improved status, or separate houses, or any of the other boons and benefits which in a sympathetic spirit we are now endeavouring to comprehend and to compass as far as may be. If all experience be not valueless, success in the career of psychiatry will still largely depend not on diploma or degree but on the proved possession of inborn qualities of character, capacity and feeling which give to labour its reliability, effectiveness and grace. I do not perpetrate the folly of thinking that the possession of the diploma is incompatible with the possession of these essential personal qualities, but I protest that inasmuch as the diploma can, at most, be but a sign of a varying degree of acquirement within a narrow range of that wide field of knowledge which is applicable in our work, it can never be, and ought never to be, the sole passport to advancement and success.

What I have said may earn for me the title of "reactionary"—not necessarily a term of opprobrium. The reaction which I advocate is against the pessimism which petrifies British effort by belittling it, and against the optimism which overloads with exaggerated hopes—the precursors of inevitable disappointments.

The Mental Deficiency Bill, 1912. By THEO B. HYSLOP, M.D., F.R.S.E. A discussion on the legislative proposals for the Care and Control of the Mentally Defective, opened by Dr. Theo Hyslop at the Annual Meeting of the Medico-Psychological Association held at Gloucester on July 12th, 1912.

THE proposals for legislation as contained in the Mental Deficiency Bill are here dealt with under the following heads, *viz.* :

(1) The need for legislation as evidenced in the Report of the Royal Commission on the Care and Control of the Feeble-minded.

(a) The scope and limitations of the definition of the feeble-minded.

(b) The classes of the feeble-minded for which legislation is most urgently needed.

(2) Do the legislative proposals contained in the Mental Deficiency Bill ensure adequate provision for the most needful cases?

(3) Is sufficient protection ensured for existing institutions for idiots and imbeciles and for other institutions in which defectives are at present treated?

(4) Is the liberty of the subject adequately safeguarded as regards—

(a) Certification?

(b) Re-certification?

(c) Discharge?

(5) Are the objects of the Bill reasonably attainable from the points of view of—

(a) Administration?

(b) Economy?

In opening the discussion attention is paid to general principles rather than to the consideration of details, which doubtless will, in due course, be subjected to many modifications and corrections. It has seemed advisable and politic to attempt to re-establish to our own satisfaction the conviction as to the necessity for legislation for the mentally defective, and in discussing the means proposed to remedy some of the evils known to exist it also seems advisable and politic to bear in mind that

if we are in complete agreement as to general principles, we must not by hostile criticism, ill-proportioned or ill-advised magnification of details furnish others with pretexts for the blocking of the Bill altogether.

(1) *The Need for Legislation as Evidenced in the Report of the Royal Commission on the Care and Control of the Feeble-minded.*

The references in the Royal Warrant to the Commission were—"to consider the existing methods of dealing with idiots and epileptics, and with imbecile, feeble-minded, or defective persons not certified under the Lunacy Laws; and in view of the hardship or danger resulting to such persons and the community from insufficient provision for their care, training, and control to report as to the amendments in the law or other measures which should be adopted in the matter, due regard being had to the expense involved in any such proposals and to the best means of securing economy therein;" and also "to inquire into the constitution, jurisdiction and working of the Commission in Lunacy and of other lunacy authorities in England and Wales, and into the expediency of amending the same or adopting some other system of supervising the care of lunatics and mental defectives; and to report as to any amendments in the law which should, in the opinion of the Commission, be adopted."

In accordance with their interpretation of the references the Commission considered the existing methods of dealing with the following classes of persons, *viz.* :

(1) Idiots, whether certified or uncertified under the Lunacy Acts or the Idiots Act.

(2) Epileptics, whether certified or uncertified under the Lunacy Acts or the Idiots Act.

(3) Imbecile, feeble-minded or defective persons not certified under the Lunacy Acts.

An extension of the Royal Warrant, dated November 2nd, 1906, authorised an inquiry into the constitution, jurisdiction, and working of the Commission in Lunacy and of other lunacy authorities in England and Wales, and into the expediency of amending the same or adopting some other system of supervising the care of lunatics and mental defectives.

It became a duty, therefore, to inquire into and report upon

the constitution and working of the Lunacy Commission, the Judge and Masters in Lunacy, and the Lord Chancellor's Visitors in Lunacy.

The original reference covered the United Kingdom of Great Britain and Ireland, and evidence was taken from Scottish and Irish witnesses.

The Commission considered the evidence given before previous Royal Commissions and Committees, and they also obtained through the Foreign Office and Colonial Office full particulars of the manner in which foreign countries and the Colonies are dealing with the questions submitted in the reference. In addition to this, five of the members of the Commission visited the United States of America, whilst others visited numerous institutions in England and Wales, Scotland and Ireland, and on the continent.

It may be mentioned also that in order to obtain statistics on which to base estimates, etc., medical men were appointed to make a thorough inquiry in regard to the number of mentally defective persons (including "epileptics") in sixteen separate typical districts, both urban and rural, in England and Wales, Scotland, and Ireland.

Mention has been made of the terms of reference and the scope of inquiry to show that the country was fully aware of the gravity of the situation and of the pressing need for detailed information. The appointment of the Royal Commission was in itself but an inevitable sequel to a long-felt need for the solution of a problem which has become, with each successive year, more and more pressing. The Commission was not called upon to break new ground, but to report upon conditions actually existing, and to suggest a remedy. Thus it will be understood that the Report of the Royal Commission, far from being some new and startling thing sprung upon an unexpectant country, was merely an authoritative confirmation of the existence of conditions long known to have been in need of attention.

Of the gravity of the actual state of the mentally defective the Royal Commission was left in no doubt. The mass of facts they collected, the statements of their witnesses, and their own personal visits and investigations, compelled the conclusion that "there are numbers of mentally defective persons whose training is neglected, over whom no sufficient control is exercised, and whose wayward and irresponsible lives are productive

of crime and misery, of much injury and mischief to themselves and to others, and of much continuous expenditure wasteful to the community and to individual families."

"We find," says the report, "a local and 'permissive' system of public education which is available here and there for a limited section of mentally defective children, and which, even if it be useful during the years of training, is supplemented by no subsequent supervision and control, and is in consequence often misdirected and unserviceable. We find large numbers of persons who are committed to prisons for repeated offences, which, being the manifestations of a permanent defect of mind, there is no hope of repressing, much less of stopping, who do not require the careful hospital treatment that well-equipped asylums now afford, and who might be treated in many other ways more economically and as efficiently. We find also at large in the population many mentally defective persons—adults, young persons, and children—who are, some in one way, some in another, incapable of self-control, and who are therefore exposed to constant moral dangers themselves, and become the source of lasting injury to the community."

Much other evidence from both towns and rural districts was obtained from the reports of the medical investigators. These reports indicate evils of extreme gravity which require the speediest attention. They refer "chiefly to feeble-minded persons connected with no institution and living in the local conditions and surroundings in which they have been brought up. Many of them no doubt remain with their families and are kindly treated. But very many are untrained and uncared for. Leading irregular and purposeless lives, they become entirely undisciplined and fall into vice and crime. And, except so far as the special classes of the local education authorities may have, in a few places, met the need in some degree, there is no public organisation to train them according to their ability, and to control and supervise them, especially in the early years of life when most can be done to aid them effectually."

A main issue suggested by these reports was, how far it is possible to create a system by which these mentally deficient persons could at an early age be brought into touch with some friendly authority, trained, and, as far as need be, supervised during their lives, in co-operation with their relations, when that is to their advantage, or when it is desirable, detained

and treated in some measure as wards of the State. The evidence also suggested that "as so many authorities are brought into contact with these persons—poor law, prisons, schools, and the like—in some way a settled plan of action should be established between the various agencies, so that some one supervising authority should see that they did not pass from one authority or institution to another, helped or detained a little at each, but permanently cared for by none."

With regard to the number of defective persons, there were estimated to be approximately 149,628 in England and Wales, or *·46 per cent.*, apart from certified lunatics. Of this total, 66,509 or *44·45 per cent.* require provision either (1) in their own interest, or (2) for the public safety. "There may be many others," says the Report, "for whom the present accommodation is not ideal"; these are not here included, but only such cases as are improperly, unsuitably or unkindly cared for, or who by reason of particular habits and characteristics are a source of danger to the community in which they live.

It will thus be seen that legislation is urgently needed for no less than 66,509 of the 149,628 mentally defective persons in England and Wales alone, the total number of mentally defective persons, including certified lunatics, being estimated at 271,697, or *·83 per cent.* of the population. As regards Scotland, *34·57 per cent.* of the defective were estimated as being urgently in need of provision, whereas in Ireland, as referred to in the statement from the Irish Division of our Association, there is immediate necessity for suitable provision for no less than *66·06 per cent.* of the mentally defective. That some provision for Ireland should be made is evident, and doubtless Ireland would have been included in the Bill, in much the same way as is Scotland, were it not for the possibility of the constitutional relationship between Great Britain and Ireland undergoing a change in the near future.

It seems almost unnecessary for us to endorse the findings of the Royal Commission, and yet it would appear advisable to add our testimony to it in order to help various sections of the community to appreciate the existence of evils which are real and not merely a fanciful necessity based upon theories emanating from any school of eugenics. I venture to submit therefore that we are agreed as to the need for immediate legislation for the mentally defective.

(a) *The Scope and Limitations of the Definition of the Feeble-minded.*

In drafting the Mental Deficiency Bill great difficulty has arisen owing to the want of a really adequate definition of mental deficiency. In the report of the Select Committee of this Association appointed to consider the Bill it is stated :

“The kernel of the whole Bill lies in clause 17, defining the persons subject to be dealt with by the Bill, and it must be borne in mind that such persons must come under both sections (1) and (2). On examination it will be seen that the sub-sections (a) to (f) and (a) to (e) are so framed as to include a very wide range of mental defectives, embracing habitual criminals, inebriates, the uneducable, the unemployable, the subjects of drug habits, and persons unfit to procreate. While agreeing with the inclusion of such persons in the Bill from a general standpoint, your Committee feel that the sub-clauses are too vaguely worded, and that further definitions are needed, particularly in regard to Clause 17 (e), dealing with those who are to be deprived of the opportunity of procreating children.”

The feeble-minded, according to the definition submitted to the Royal Commission by the Royal College of Physicians, are “persons who are capable of earning a living under favourable circumstances, but are incapable from mental defect existing from birth or from an early age (a) of competing on equal terms with their normal fellows ; or (b) of managing themselves and their affairs with ordinary prudence.”

This definition, whilst excellent and comprehensive, is in itself not only hardly sufficient to form a basis for legislation, but it is also apt to give rise to many misgivings and apprehensions in the public mind, inasmuch as it might include many who might with justice be excluded from the provisions of any Bill involving any deprivation of liberty of the subject.

In the Report of the Royal Commission (vol. viii, p. 7) the words “mentally defective” were used to represent the whole group of cases that came within the scope of the investigation, whether they could, or could not, be certified under the Lunacy and Idiots Acts.

Of the *mentally defective* there were two classes, *viz.* :

(1) Those who from disorder of the mind, or through mental

infirmity arising from age or from decay of their faculties, have lost the power of managing themselves or their affairs, *i.e.*:

(a) "*Persons of unsound mind*," who from disorder of the mind have lost the power of managing themselves or their affairs.

(b) "*Mentally infirm persons*," who through mental infirmity arising from age or from decay of their faculties have lost the power of managing themselves or their affairs, *i.e.*, persons who have at some time been normal in mind but have become abnormal.

(2) Those in whom the brain is in some way undeveloped, and will remain undeveloped throughout life, *e.g.*, idiots, imbeciles, feeble-minded, moral imbeciles, etc.

The Royal Commission based its conclusions on general principles, and advocated that special protection should be extended to all such mentally defective persons, and that this special protection should be given on the ground of the mental defect rather than because of destitution, crime, etc. They adopted the principle of protection of the mentally defective person *for such time only* as might be necessary for his good and for the good of the community, and in the mode of protecting such mentally defective person and his property the principles and privileges now granted only to lunatics and idiots were merely to be extended so as to give equal advantages to all classes of mental defectives.

(b) *The Classes of the Feeble-minded for which Legislation is most Urgently Needed.*

Viewed in the light of the principle of protection, Clause 17 of the Bill defines the various classes of defectives subject to be dealt with and for whose protection legislation is urgently needed. In view of the defect (for legislative purposes) in the definition of the mentally defective as given by the Royal College of Physicians, it would probably be more satisfactory to the public mind if the definition of feeble-minded persons (Clause 17, Sub-sect. 2 (c), p. 9) referred to persons who may be capable of earning their living under suitable supervision, but who are incapable, through defect of mind existing from birth or from an early age, of managing themselves and their affairs with sufficient prudence to maintain an independent existence.

Clause 17, Sub-sect. 1 (e), which deals with the question of

procreation, opens the door to much discussion and misconception in the public mind. As stated in a memorandum by the National Association for the Feeble-minded, and endorsed by the Special Committee of the Medico-Psychological Association of Great Britain and Ireland, the wording of this sub-clause is too vague for any Act of Parliament, and it is doubtful if public opinion is yet sufficiently ripe for the sanction by law of the adoption of such a general measure.

In the history of every prophylactic measure adopted for the benefit of the greatest number there has ever been much opposition and delay owing to fetish worship of the liberty of the subject, and, in this instance, in spite of overwhelming evidence of the existence of much evil inheritance that tends to destroy the vital energies of the nation, there are many who will raise their voices in indignant protestation. One point for our consideration is whether this matter of preventing procreation by the mentally defective is of equal urgency to the other matters referred to in the Bill. I, for my part, believe that it is one of the most important and farthest reaching of the benefits proposed, and that this sub-clause alone raises the principle of the Bill to a higher plane than does any other item in it.

The importance of this question is so great that a great deal of discussion will inevitably centre round it. We, who have to concern ourselves with the problems of degeneration, know quite well that much of the defective-mindedness so prevalent nowadays might in the future be obviated. We also know that, unfortunately for the welfare of the race, our advice and protests are only too frequently entirely ignored by those who seem incapable of thinking of anything beyond the gratification of their own individual desires.

I have said elsewhere ("The Marriage Laws in Relation to National Health," *National Health*, July, 1909):

"It is in my opinion not only justifiable, but even necessary, that all the facts gathered by scientists as to the laws of inheritance and *the propagation of disease by heredity should be taken cognisance of with a view to determining what are the real just causes or impediments why two persons should not be joined in holy matrimony*, and that true biological unfitness should in itself not only be a certifiable reason given by the physician, but that the law should uphold that certificate as it does in the case of the inebriate and the insane.

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"We see so many evidences of degeneration resulting from alcoholism in parents that I am strongly of opinion that just as the habitual drunkard is deprived of his liberty either in an inebriate home or prison, so the existence of the *alcoholic habit* should be a bar to matrimony.

"Any person who has made alcohol a necessity or is unable to resist the temptation to indulge in alcohol may attain to a certain degree of success in mind or estate, but, biologically considered, the world would be the better had he never been born into it. And, needless to say, the marriage of such an one is, in my opinion, a sin and ought to be barred by law.

"I may also state that the Church will willingly fall in with any scheme which would relieve it from its responsibilities in sanctioning the marriage and propagation of the biologically unfit. The only too frequent total disregard of medical advice on the matter renders legislation imperative for the national health."

In view of the difficulty that may be experienced in reconciling public opinion to the adoption of Clause 17 (e) as it now stands, it might be advisable to restrict it in some way, either (1) by depriving each case of the opportunity of procreating children only on the advice of the Commissioners and with the consent of the Secretary of State, or (2) in whose case in addition to mental deficiency such circumstances exist as may be specified and advised by the Commissioners, and approved by the Secretary of State, as injurious or dangerous to the community, and as being circumstances which make it desirable that they should be not only subject to be dealt with under the Act, but that they should also be deprived of the opportunity of procreating children. This, of course, should not interfere with, or in any way restrict, Clause 17 (e), which would remain as part of the definition of mental deficiency.

Certain it is that many will look to us for guidance in this matter, and if we can in any way remove some of its difficulties our recommendations will go far to facilitate the acceptance of the Bill.

(2) *Do the Legislative Proposals contained in the Mental Deficiency Bill insure Adequate Provision for the most Needful Cases?*

A point on which there may be some difference of opinion is the determination as to which classes of defectives are in most

urgent need of help, *i.e.*, those who are already adequately or inadequately provided for, or those who are at large and who have no provision whatsoever made for their care or control.

The Royal Commission was equally emphatic with regard to the necessity for provision being made for both these classes, and in the Mental Deficiency Bill an attempt is made to meet the need in both cases. Inasmuch, however, as the financial aspects of the question do not appear to be adequate for both those already under some form of care and those not yet under care, it seems open to discussion as to whether we should object to the Bill on the ground of its being inadequate to meet all classes of cases, or to give it our support in the hope that after it has helped to relieve some of the most needful cases its sphere of usefulness may be further extended until all classes of defectives are benefited.

We who in the course of our professional experience meet with persons of defective mind who do not readily come under the Lunacy or Idiots Acts, and for whom there may be a reasonable hope of improvement if placed temporarily under some modified form of supervision and control, must feel some disappointment that the Mental Deficiency Bill makes no provision for such cases. In fact, *temporary and developmental attacks of mental deficiency are still inadequately provided for*, and we have to fall back upon the provisions of the Lunacy and Idiots Acts, or, for want of some other course to pursue, to allow the cases to run the risk of coming under the Inebriates or Criminal Acts. It would seem desirable therefore that some provision should be made for the inclusion in the definition of the mentally defective such temporary and presumably curable cases. This would, of course, also necessitate careful revision of the methods of re-certification and discharge. Whether voluntary boarders should enjoy the same privileges as are afforded to voluntary patients under the Lunacy Acts is a matter for discussion.

- (3) *Is sufficient Protection ensured for Existing Institutions for Idiots and Imbeciles, and for other Institutions in which Defectives are at present treated?*

The Special Committee representing the voluntary institutions for idiots, imbeciles and the feeble-minded have drawn up a series of suggestions in which they urge the claims for

recognition of the institutions as being suitable for the reception of defectives subject to the Act. Undoubtedly these claims are very strong, and it would appear advisable that they should be adequately recognised.

The chief objections to them are :

(a) Participation in the grant from public funds will necessarily *diminish voluntary contributions*.

(b) The utilisation of a large portion of the proposed Government grant for the purpose of maintaining those who are already under suitable care under the Idiots Act will *diminish the already too meagre funds available for providing for more necessitous cases*.

(c) Unless complete *segregation* could be given to mental defectives subject to the Act, only such cases as would be eligible under the Idiots Act should be treated in idiot and imbecile institutions.

(d) The reception of defectives in idiot institutions would necessitate for such institutions a *dual system of central control*, i.e., under the Mental Deficiency Act and the Idiots Act respectively.

(e) The *stigma* of control under the Idiots Act might, in some instances, be attached to those who would advisedly, and perhaps more appropriately, come under the comparatively lesser stigma of mental deficiency. It has already been said, and it will again be said, that the Mental Deficiency Bill will label as defectives many who are at present at liberty. It is doubtful, therefore, as to whether the public will sanction an extension of the powers of the Bill whereby any defective subjects under the Act may be controlled, not in an institution primarily for defectives, but for idiots and imbeciles of every grade and class. Mention is made of these points, not from any want of sympathy with the claims of the voluntary institutions for idiots and imbeciles, but as indicating a series of difficulties of which the opponents of the Bill will only too readily avail themselves in their efforts to frustrate all legislation whatsoever.

(4) *Is the Liberty of the Subject adequately safeguarded as regards* (a) *Certification?* (b) *Re-certification?* (c) *Discharge?*

(a) *Certification*.—It has been suggested that under the provisions of the Bill undue facilities are given for the certification

of mental defectives who now enjoy their liberty without in any way being a source of danger either to themselves or to others. This misapprehension will be removed when the amended Clause 17 becomes fully understood.

(b) *Re-certification*.—With regard to reports and continuation orders the Commission will, as is the case under the Lunacy Acts and Idiots Act, see that these returns are sufficient for the purpose in every individual case, and doubtless we agree with the just criticism that *each case should be dealt with on its merits and not classed with others in a general report*.

(c) *Discharge*.—There are undoubtedly many instances in which an apparently incurable defective has improved sufficiently to be able to earn a modest livelihood. Every idiot and imbecile institution can afford testimony to this, and the public must be duly apprised of the fact that “once a defective always a defective” is not without exceptions, and that *due facilities will be offered for the discharge of cases which may have been subject to the Act, but in whom the improvement has been so great as to warrant their discharge from the provisions of the Act*. Such procedure would, of course, be on the advice of the Commissioners and with the consent of the Secretary of State.

Bearing these points in mind, the liberty of the subject would be as efficiently safeguarded under this Bill as it now is under the provisions of the Lunacy Acts and the Idiots Act. In any case, however, the protection offered to the mentally defective far outweighs any possible risk or disadvantage which, under the Bill, are minimised.

Mr. McKenna, in moving the second reading of the Bill, pointed out very clearly that the provisions of *the Bill would not assail any of the accepted principles of individual liberty in the case of the feeble-minded any more than we interfere with that liberty now*. “Under existing law, when we clapped the feeble-minded into prison, into workhouses, or when we taught the children in special schools we interfered with that liberty in the wrong way.” We entirely agree with him that the feeble-minded person ought not to be dealt with in prison for an offence which was no more than the offence of being feeble-minded, and he ought not to be treated in the workhouse, because his case was one in which workhouse treatment was no good to him. On the other hand, treatment in a suitable home, if it did not cure him, would give him a prospect of

leading a fairly good and useful life. A defective was not sent to a home in perpetuity. He was only sent there after being committed by a Court of Summary Jurisdiction. A medical certificate had to be obtained and the right of appeal was given. Mr. McKenna also intimated that the majority of the cases which would be dealt with would be those of persons who were now sent to lunatic asylums or kept in workhouses, and that the Bill was only providing an appropriate method of dealing with persons who were now dealt with most inappropriately.

With regard to the element of compulsion he pointed out that the compulsion on the local authority to make an investigation relative to the feeble-minded persons within its area and to provide for them was limited inasmuch as there was *no compulsion on the local authorities to provide and maintain homes for feeble-minded persons beyond such number as that for which the State contributed*. This power given to the local authority to provide for all the feeble-minded within their area without compulsion to exercise that power if their means did not allow must necessarily tend to allay any misapprehensions in the minds of county and municipal councils.

(5) *Are the Objects of the Bill reasonably Attainable from the Points of View of (a) Administration ? (b) Economy ?*

(a) *Administration.* — In the memorandum on "Dual Authority," accompanying the report of your Select Committee, are set forth certain reasons why the Lunacy Commission should be the Central Authority, and in the discussion which is to follow, other reasons will be given to show why the setting up of any other authority would be inadvisable. So far as the present Lunacy Commission itself is concerned, it would need to be considerably extended. In the report of your Select Committee you will see that the Committee are strongly of opinion that *the Board of Control, whether in the Secretary of State's or other Government Department, should have as its first members the present Lunacy Commissioners*, and they suggest alterations in the Bill in accordance with this view.

Whether the Lunacy Commission is to be under the Lord Chancellor or the Home Office is a matter for others to determine. We who have for so long worked under the Lord Chancellor cannot but express our feelings of appreciation and

allegiance, and in the event of transference to the authority of the Home Office we trust that the peculiarly private nature of the circumstances with which the Lunacy Commission has to deal will remain just as private and as well safeguarded against public curiosity as at present, and we trust also that even the participation in relief out of the public funds will not render the Commission less independent or through the medium of any Minister of State more subject to needless questioning concerning matters which good taste demands should be private and confidential.

So far as the Masters in Lunacy and the Lord Chancellor's visitors are concerned, whether they become incorporated with the Lunacy Commission or not, there are many reasons why they should still maintain independence.

(b) *Economy*.—Mr. McKenna clearly indicated the hopes of the Government with regard to Clause 43, in which in order to start the local authorities' work it was proposed there should be a payment from the Exchequer of £150,000 a year.

In view of the fact, however, that the Royal Commission estimated that 66,509 defectives were in urgent need of provision being made for their care and protection the Government Grant of 7s. per head per week would be insufficient to meet the needs of the case, even for the most necessitous cases. It is quite evident, as pointed out by Mr. McKenna, that there would be economies in respect of people taken out of the work-houses, lunatic asylums and prisons, and, we may add, it was not anticipated that necessity would arise for an extension of the benefits to defectives already provided for in the voluntary institutions for idiots and imbeciles. It is evident also that to a considerable extent the feeble-minded homes would be self-supporting. In this respect Mr. McKenna was quite frank, and stated that he was not without hope that *while the grant of £150,000 would not cover the whole ground, it would be sufficient to enable the local authorities to make a substantial start in the work which lay before them.*

Undoubtedly there will be much difficulty, and possibly friction between the various authorities and institutions, as to which defectives ought to have precedence in claim, and it is difficult to estimate what number of defectives will be discarded from various institutions as being defectives subject to the provisions of the Act. One danger to be apprehended is

that there may be a tendency to transfer so many cases from existing institutions that there may be no funds left for the care and protection of even more necessitous cases, which must, therefore, remain unprotected, totally unprovided for, and consequently continue to be a source of danger to themselves and to the community.

DISCUSSION,

At the Annual Meeting held on July 12th, 1912, at Gloucester.

Dr. HYSLOP said that he had confined himself to general principles, because amendments could be brought up in the Committee stage. He felt sure that a large section of the community were looking to them that day for some authoritative statement with regard to these principles. He ventured to suggest that the discussion would be more fruitful if it proceeded on these lines than if the speakers entered into details, which could be better dealt with at a later stage.

The PRESIDENT said the Association had before it to-day probably the most important subject which could claim its attention. It had been gradually coming to the front, and members of the Association recognised fully that they must join in the general endeavour to do something on the matter to improve public health and take their part in aiding the prevention of disease. The Association had just learned from Dr. Hyslop the result of his most careful study of this difficult subject. It had been put in such a way that the most important principles had been raised for discussion. There were present on this occasion some who were not members of the profession, but who were deeply interested in the question of dealing with the defectives. And it was not only of interest, but a great advantage that this subject should be considered not only from the point of view of what was scientifically desirable, but of what was practically attainable. He hoped that ladies and gentlemen present who had had to deal with cases of this sort would take part in this discussion, and so help the meeting to get a grip of the principles which the Association could definitely recommend as the lines upon which a Bill of this kind should be drawn.

Dr. SPENCE said that Dr. Hyslop had stated very clearly the attitude of the Association regarding the proposed legislation

on this subject. Their Parliamentary Committee had decided to go as far as possible, and as strongly as possible, for an alteration of that clause in the Bill which had reference to the formation of a new Board of Control, and that the paragraphs dealing with procreation and with a further definition of mental defectives should be incorporated in the Bill. There was one point which Dr. Hyslop did not mention, namely, that in forming a new Board of Control it was felt strongly by the Parliamentary Committee that the expression used in the Bill was a little too wide. It might mean that none but laymen should be appointed to that Board, and the Association felt strongly that at least a fair proportion of medical men, with special qualifications on the subject, should be added to that Board. It only remained for him to thank Dr. Hyslop for the trouble he had taken in going into this matter, and in taking the chair at a special meeting whose object was to inquire into it. The Parliamentary Committee has asked that Sub-Committee to continue its work and keep the matter alive until such time as it could be seen whether the measure was likely to go through Parliament this Session.

Dr. HYSLOP said it would be convenient to answer now the point raised by Dr. Spence. With regard to the Board of Control including medical men, that was one of the definite recommendations agreed upon by very many, and would come forward at the Committee stage.

Dr. SHUTTLEWORTH said that though he rose in obedience to the President's signal he did not feel competent that hot morning to add any remarks worth listening to on the most excellent paper which Dr. Hyslop had read. The reader had asked speakers to confine their remarks to principles, and he agreed with what Dr. Spence said, that the general principles laid down by Dr. Hyslop were such as members present could not fail to accept. In the notes which he, Dr. Shuttleworth, had prepared, attention was directed so much to historical detail that he hesitated to bring them forward on this occasion. But he might be permitted to occupy two or three minutes in going a little way from the subject prescribed for him. There were two points on which, in his professional life, he could be said to have had some special experience, namely, with regard to the education and training of mentally deficient children, and also with regard to the relation of the so-called idiot

asylums to the general scope of dealing with mentally defective persons. First of all, with regard to the children. What struck him about the definitions of imbecile and of feeble-minded defectives in the Bill, and, indeed, about the definition of the latter class which had been suggested as an improved substitute, was the practical difficulty of applying definitions resting upon capability of earning a living to the case of quite young children. In many cases it was impossible at an early age, and before the effect of appropriate training had been tried, to prognosticate with accuracy the degree of improvement eventually attainable. Provision had, indeed, been made in Clause 12 of the Bill to defer the branding, as permanently defective, of children of the elementary school class until the result of training in the special schools established under the Act of 1899 had been ascertained. These would have a period of probation up to sixteen years of age, but apparently children of a higher social grade, taught at home or at special schools run for private profit (which could not be recognised under the existing rules of the Board of Education), had not a similar privilege. As one engaged in consulting practice with regard to the latter as well as the former class, he thought it would be a hardship to have to label prematurely in statutory form a child who had not had the benefit of appropriate training. There were many cases in which a definite diagnosis of ineradicable mental defect should be deferred until the effect of suitable care and instruction had been adequately tested. Well-marked cases of primary amentia were, of course, sufficiently obvious to justify immediate certification; but even in these it was not always expedient to definitely pronounce them hopelessly defective, as to do so was apt to discourage parents from giving their children the benefit of such training as would improve them as far as might be possible. In other cases of apparent defect in quite young children, unfitting them for ordinary education, the effect of special methods should be tried before labelling them as mentally defective. Too great stringency in the requirement of certification in legal form would be prejudicial to the best interests of such children, as parents were naturally highly sensitive as to the imputation of mental defect in their offspring; and to give them the benefit of the doubt the Select Committee had proposed a new sub-section to Clause 25, authorising reception

into a certified house or institution on a medical certificate that the case required such special care, without using the designation of "mentally defective." Indiscriminate or premature labelling was to be deprecated in doubtful cases as the stigma would be most detrimental to future prospects. Some judicious observations on this subject will be found in the Select Committee's memorandum *à propos* of clause 18 of the Bill. Reference is there made to the case of a girl who, though in early life presenting signs of mental abnormality, completely emerged from that condition under suitable care and was now successfully training as a hospital nurse. Instances might also be cited of children who had suffered at an early age from depressing infantile illnesses or severe convulsions, in whom for a time there were signs of mental impairment, but who had subsequently proved fit for education and had attained an honourable position in after life. One such case within his knowledge, deemed hopeless up to eight years of age even by his mother, now occupies a post in H.M. Civil Service. It would be iniquitous if by too stringent an application of the notification provisions of the Bill useful careers should be rendered impossible for such. He trusted, however, that the administration of the large inquisitorial powers proposed to be conferred on local authorities would be exercised with discretion and with as little offence as possible. There was another subject which he wished to refer to, namely, the relation of the idiot institutions to the care of mental defectives generally, and more particularly their claim to recognition in connection with the feeble-minded under this Act. He did not wish to go back too far into ancient history, but he thought it only due to the comprehensive character of their useful work to point out that though established as "asylums for idiots," that designation was much more inclusive fifty years ago than as commonly accepted to-day. The term "idiot" was then held to embrace all classes of mental defect. We find recorded in Seguin's great work on the training of idiots, published in 1846, numerous cases of "superficial idiocy," which were, no doubt, equivalent to the "feeble-minded" class as recognised at the present time. And there was evidence that although the institutions at Earlswood, Colchester, Knowle, Starcross, and the Royal Albert Asylum, Lancaster, were originally entitled "Asylums for Idiots," they had, from

the first, received patients who nowadays would be called feeble-minded, and would consequently be dealt with by this Bill. The objects of these institutions, as set forth in their published constitutions, were "not merely to take the idiot under their care, but especially by the skilful and earnest application of the best means in his education to prepare him, as far as possible, for the duties and engagements of life." So it was evident that the founders of these institutions contemplated dealing not simply with the lower grades of mental defect, but with cases which could be taught remunerative occupations. Thus at Earlswood one found that in its early days good specimens of joinery and carpentry were accomplished, and several of the trained inmates were retained as paid servants of the Institution. In the first report of the Eastern Counties Asylum at Colchester, Dr. Martin Duncan, F.R.S., Medical Officer, clearly divided the cases dealt with in that Institution into the three classes of "simpletons, imbeciles, and idiots," and stated: "The first are those feeble-minded who have not been able to receive instruction in the ordinary manner, who do not possess the experience in life peculiar to their age in their social position, and who are said to be dolts, stupid, and fools by the uncharitable. They have nearly all the faculties to a certain degree, but indicate their alliance to the true idiot by their physiological deficiencies and general inertia of mind. They are to be distinguished from the backward and ill-taught." That was written more than fifty years ago, and it showed that, even at that date, there was a fairly clear conception of the class which now-a-days had been separated out and designated feeble-minded. For if one compared this description and definition of the feeble-minded with that given in clause 17 of the Bill, it would be seen that the founder of these institutions intended to provide not merely for idiots, but also for the milder forms of mental defect, though they had to certify all those admitted as idiots or persons of unsound mind. These statutory requirements were found seriously to militate against the admission of more improvable cases, owing to the natural repugnance of parents to have their children, however young and promising, formally certified in these terms under the lunacy law. In 1884 the authorities of the Royal Albert Asylum drew up a statement, subsequently joined in by those of the other institutions, setting forth the inappropriateness of

the lunacy forms for such cases, and suggesting a simple certificate to the effect that the proposed patient was "of deficient intellect, and a proper person to be received into an institution for the care and training of the *weak-minded*." These suggestions were pressed upon the attention of the Lord Chancellor and the Lunacy Commissioners, and in 1886, mainly through the exertions of the late Sir John T. Hibbert, the "Idiots Act" was passed, in which for the first time the term "imbecile," in lieu of the terms proposed above, received legislative sanction. The Act bore an unfortunate title, inasmuch as its main object was to enable these institutions to receive a higher class of imbeciles, such as are now designated "feeble-minded." It had, indeed, been estimated that at least 20 *per cent.* of the patients in those institutions were of the feeble-minded class. Consequently the institutions naturally thought they had a claim for such financial aid as was afforded under the present Bill towards the care and training of feeble-minded cases. Dr. Hyslop had pointed out the difficulties there might be in administration and differential classification, but surely those difficulties would be diminished if the Lunacy Commissioners were the sole supervising authority under the new Act. He could add that the institutions of which he was speaking had no desire to depart from the supervision and control of the Lunacy Commissioners, and he agreed that it would not do to have a dual control. He would not elaborate this matter further, as he knew there was among them a representative of one of the institutions concerned, who would perhaps supplement what he had himself said, and supply omissions.

Dr. LANGDON DOWN said he agreed that it was difficult to separate details from the principle in the discussion, because, as far as principles were concerned, members had been fairly agreed for some years past. The details could be put into some sort of grouping, and then some understanding could be come to concerning them. The main groups, as they occurred to him, were, first of all, the authority to control, and that was a very important detail, so much so that it almost became a general principle. The second was the question of the definition clause and the fears of the public, and the third was the linking up of this Act with those dealing with children—educational and otherwise. He would discuss first the second of the topics he had mentioned, because the first had already been

dealt with somewhat fully by Dr. Hyslop. For the comfort of those who were in fear about this Act, he would point out that the provision as regards a magistrate's order was much more strictly safeguarded than was the case with the Idiots Act, and, he believed, more safeguarded than in the Lunacy Act, because it seemed to him that the procedure foreshadowed was a sort of judicial inquiry, with witnesses examined by a magistrate in a formal way in every case. So far there was nothing in the Bill which stated that a certificate was to be supported by evidence in writing. It was quite clear, to his mind, either that the certificate would have to be supported by detailed evidence in writing giving the grounds on which the person who signed the certificate held the view that the person was defective, and so ought to be dealt with by the Act, or else, when the case came before the magistrate, he would require evidence to be called and presented to him orally. He suggested that it would be desirable, when the schedule came out giving the forms of certificate, that it should contain a requirement that the doctor should state the grounds on which he formed the opinion (1) that the person was defective, and (2) to which class he belonged. And, further, he should say why he was regarded as a person subject to be dealt with under the Act, and give the reasons on which he formed such a conclusion, not necessarily on the facts observed by himself at the time of the examination, but facts supplied to him by witnesses whom he could, if necessary, produce. He said that to show how the public could take comfort from that aspect of the matter. Then, with regard to the matter which, he understood, was raising the most feeling in Parliamentary quarters, *i.e.*, the terms of definition of "feeble-minded," particularly the paragraph which dealt with the inability of the person to compete with his normal fellows on equal terms, that, he agreed, should be modified in some such terms as Dr. Hyslop had already read out to the meeting. He pointed out that the expression "independent existence" was already assigned to a particular stage of life, which was rather different from what was here meant. Then came the very serious questions involved in the "procreation clause," and suggestions were put forward as to ways of meeting those, the principle being this: that what the State wanted to do primarily was to prevent the procreation of persons who would be a burden to the State. The Government was

primarily interested in it from the financial point of view, not so much from the eugenic standpoint as members of that Association were. So if they agreed to neglect those persons who might procreate, but did not thereby—either themselves or their offspring—become a burden on the State, they could trust to the private individuals on whom such persons became a burden to exercise control in their own self-defence. And the clause they suggested was this, to take the place of that in the Bill: "Persons who are found in, or frequently resorting to workhouses, infirmaries or other Poor-law institutions," and he suggested adding also, "or are unable to maintain their offspring without external aid, or women pregnant therein, in whose case it is desirable, in the interests of their prospective offspring and the general community, that they should be deprived of the opportunity of procreating children." This gave the grounds on which persons were to be deprived of the opportunity of procreating children, which were not to be vague biological grounds, but definite social grounds. And he thought it would be a very good addition if they could have also a kind of omnibus clause so as to include persons who needed to be dealt with under the Bill, but who did not come in under the subjecting clause. That he borrowed from the little Bill which preceded the Government Bill, the "Feeble-minded Control Bill," *viz.*, "Persons who are in need of further care and control, and are a source of injury and mischief to themselves and others." The difficulty was that there might be persons who were defectives in accordance with the definition given in clause 17 (2), but who yet had not done any such unsocial thing as to bring them under one of the classes in sub-clause 1. For example, many mentally infirm persons, many idiots and mild imbeciles needed further control and care in their own interests, but possibly they had not done anything which brought them within the categories in the first part of clause 17. For that reason his opinion was that an omnibus clause was required, one which would not be open to the objection which could be made to the "procreation" paragraph. Those who had listened to Dr. Hyslop's opening would recognise the words now suggested as having been taken from the report of the Royal Commission in describing these feeble-minded persons. It was true that clause 25 of the Bill had to be read in conjunction with clause 17. Clause 25

provided for a certain number of persons who were defective, but were not subject to be dealt with in accordance with the first part of clause 17. But it only applied to those persons if they were taken charge of under twenty-one years of age. That small addition would extend the powers under the Act to embrace those persons who had passed the age of twenty-one. So much for the objections of the public, and the way to extend the definition to cover the cases which, in their opinion, they might think it desirable should be covered. With regard to the question of children, that had already been dealt with very fully by Dr. Shuttleworth, and so he would be brief. In the Bill there was no provision for dealing with children in the elementary schools who were feeble-minded and were not susceptible of education there. From the nature of the definition, which was based upon the question whether they could earn their living or not, and also from the fact that it was yet early days in which to lay down a final diagnosis as to mental deficiency, the Bill did not touch those cases. The 1899 Act, which dealt with children of this kind in schools, was a permissive Act, and had not been at all extensively adopted, no doubt partly because there was no prospect of further treatment which would carry on the work that might be begun under that Act. Therefore it was felt to be possibly wasteful to adopt an Act which did not carry things beyond the age of sixteen. This present Bill did provide something for the future of such children as were dealt with under the provisions of the 1899 Act. No doubt it would, even voluntarily, be more and more adopted. But the question he wished to raise was whether it was not time that that Act should be made compulsory at the time that this Bill would be brought into force, because they would have here much greater facilities for dealing with the difficulties under that Act. It was clear that in scattered districts it was difficult to deal with children in special classes; it would be impossible, or very difficult to form a special class big enough and within reasonable reach of the children who would have to attend. Therefore the Act provided in such cases that residential treatment and education should be given. The Bill now being discussed opened the door to the possibility of organising residential treatment of that kind. With regard to children, he had only to add that the children under sixteen in public elementary schools were not labelled as

defectives by this Bill, and yet children of the well-to-do would have to be so labelled if they were to gain advantage from the Bill before they were sixteen years of age. With regard to the authority, he would be very brief, but he had been asked to state a few grounds which appeared to him to point to the existing authority as the best one for working this Act. The main one was that scientifically all defectives formed a natural group, and that was the essential ground on which they, as medical men, were averse to seeing an unnatural division made in the civil arrangements for dealing with a natural group. The Commissioners already dealt with many persons who came within the definitions of this Act—mentally infirm, idiots, imbeciles, feeble-minded patients were already in numbers in some of the voluntary institutions which had been spoken of, and moral imbeciles occasionally. The main essence of this Act was the power to detain, and the only body we had in this country who were experts in exercising powers of detention, other than penal powers of detention, were the Commissioners in Lunacy; whereas the Home Office was associated with penal detention, and there should be no question of detention of the feeble-minded being of that type. It was very dangerous that the prison idea of detention should get about in regard to these feeble-minded cases. Moreover, experience with regard to buildings and plans and a great stock of information had grown up around the Lunacy Commissioners; they had their own architect and staff, and if a new department were started, additional expenses would be incurred, whereas the experiences of the existing body would enable them to adjudicate upon matters likely to arise and assess them at their proper value. Then there would be the difficulty connected with working two Acts where there were penal clauses dealing with the same persons. How could they be sure that the interpretation placed upon “mentally infirm,” or “imbecile” would be the same by the Commissioners in Lunacy and the Commissioners appointed under the proposed Act? Because, after all, define as they would, the real test was the application of the definition. Here were the Lunacy Commissioners forbidding the receiving of any defective person who was mentally infirm or imbecile, and this Bill provided for it to be within the power of anyone to receive two such persons without certificate; therefore there would be an incompatibility between the

old Act and the new. On those grounds he submitted that the Association should press very strongly for the Lunacy Commissioners to be regarded as the authority on which this work was to be built up, and to be pusillanimous for fear of wrecking the Bill at this stage would be bad policy. If the Association did not show themselves to be strong they would not get their way. There was a body of opinion pushing the Government on and saying this legislation must go through. They, the members of the Association, wanted it to go through on the right lines, and he thought that at the present moment they might go boldly ahead. He understood that the question of the authority was to be left to be fought out on the floor of the House of Commons, but that House would not decide in accordance with their view unless they expressed it strongly.

Dr. DOUGLAS TURNER (Royal Eastern Counties Institution) desired to thank Dr. Hyslop for his opening paper. He wished also to express publicly his indebtedness to that gentleman for his kindness to those institutions for the feeble-minded to which he, Dr. Turner, was attached, and of which he was the only representative present. There was a reference to the uneducable and those subject to drug habits at the beginning of the report of the Select Committee of the Association, but it was his opinion that the Bill did not include the uneducable. Under Clause 13 they were excluded from the Bill. The school authorities, for instance, turned them out of schools, and they had the power to hand their names over to the new local authority, and the local authority had no power to deal with them. With regard to the subjects of drug habits, surely that came into the Inebriates Bill, not into this Bill at all. What he wished principally to refer to was the way in which the Bill affected the institutions such as he represented, *i.e.*, the charitable institutions registered under the Idiots Act in this country for the care of cases of congenital mental deficiency. Those institutions had been taking cases of every grade, from the idiot to the highest type of feeble-minded. Dr. Hyslop raised the point that certain objections might be taken to feeble-minded cases under this Bill coming into those institutions, because they would be contaminated by their association with idiots. But he thought Dr. Shuttleworth had very well answered that point. Those institutions had always taken those cases of feeble mind, right away from the foundation of the institu-

tions; therefore to say that feeble-minded cases should not come into those institutions was begging the whole question. Where the Bill would hit such places was that it would take away from them these high-grade cases. The Bill would bear hardly on these institutions in the matter of the definitions. He took it that no one would attempt to defend these definitions as such, except on the ground that working definitions of some kind were necessary. The chief objection felt by such as himself was that the terms "imbeciles" and "feeble-minded" were separated into two compartments. It was impossible to do that. That was the opinion not only of himself, but of the medical officers of all their institutions. A week or two ago Sir George Savage said the same thing, namely, that the terms "imbecile" and "feeble-minded" could not be separated by any definition. One often found the education medical officer turning a child out of a school because he was an imbecile or an idiot, and the poor law medical officer saying the guardians could not do anything for the child because he was feeble-minded. That sort of thing would arise under this Bill, which draws an administrative line between the two classes. Such ideas were bound to result in the taking from the institutions he represented the high-grade subjects of mental defect. The Home Office Commissioners would come round and say these cases were only feeble-minded, that they were not imbeciles at all, and that these institutions were only allowed under the Idiots Act to take imbeciles. By "imbecile" the Commissioner would be meaning that which agreed with the wording of the new Bill, a meaning which had never hitherto been attached to the term, and one quite different from that meant when the term was first legalised in 1886. It was a mistaken notion that institutions such as he represented took only the lower grades of defect. The case-books showed that superior forms of intellectual defect had also been taken for the past sixty-five years. Dr. Shuttleworth had already dealt with the most important statement made by their first medical officer, in which he defined the different grades of defect in a way which, as Dr. Shuttleworth had already said, stood to the present time. Another point about this first report quoted from by Dr. Shuttleworth was that his own institution was described as "a school for the feeble-minded," although at that time it had to be licensed annually at Quarter Sessions as a private asylum,

and the patients, even those belonging to the highest grades, had to be certified under the Lunacy Acts. No doubt confusion had arisen in people's minds because since 1886 they had worked under what was known as the Idiots Act. This Act also made legal the term "imbecile," and that name was intended by those who drafted the Act to include the highest type of defect now known generally as feeble-minded. These high-grade cases were constantly, at the present time, certified under that Act as imbeciles. The definitions of the present Government Bill would prevent this in the future by labelling the high-grade cases as feeble-minded. Dr. Shuttleworth helped to draft the Act of 1886, and he believed the term originally used in it was "mental defect," not "imbecile," and if that term had remained he believed there would not have been the trouble which had occurred since. It had taken twenty-five years for the Government to reach their point of view. He did not see why the institutions such as his should be penalised and have their best cases taken away from them, nor why they should now cease to take the class of case which they had been receiving for sixty years. In connection with these places were extensive schools and training shops, and on the staff were those who were highly skilful in teaching the crafts. There was a likelihood that all that expense would have been thrown away when this measure became operative. That might be remedied by the addition of a few words at the end of clause 1, making it clear that the word "imbecile" shall, for the purpose of that clause, retain its old meaning and include the feeble-minded. Dr. Shuttleworth had referred to the Elementary Education (Defective Children's) Act of 1899. When that was drafted the original term was not "mental defect," but "feeble-minded," and the feeble-minded were defined as those who were not imbecile. That term was dropped, and "defectives" was substituted. It was because the representatives of the imbecile institutions convinced the Government that at that time and for many years previously these feeble-minded cases had been certified as imbeciles under the Idiots Act. Another objection which institutions under the Idiots Act felt they had was one which Dr. Hyslop raised, namely, what seemed to them an unfair discrimination against them as compared with the new institutions which would come into being under the proposed

Bill, those which would take the same class of case, and which would be certified under the Bill. He could not see any protection in the Bill as far as the present institutions were concerned, except that if they could still get money out of charitable people they would be allowed to do so, and thus save the taxpayers' pockets by keeping a certain number of defectives. It would scarcely be believed that institutions such as he represented would be excluded from the new Bill altogether and would not be allowed to take patients under it; neither the new local authorities nor the local educational authorities could contract with them, and grants could not be claimed. Dr. Hyslop raised the question of grants, but those institutions were not intending to ask for grants for the patients who were already in the institution, and who had been elected to them either for life or for a certain number of years. They should be allowed to contract for other patients under the Bill, and they should obtain grants for those cases; but there was no intention on the part of those institutions to ask for the whole of that £150,000. There was a wish on the part of the institutions he was speaking of to remain under present conditions under the Idiots Act, and the reasons for that seemed sound. First, they took a certain number of uneducable cases; these did not come under the proposed Bill, and they had to be somewhere, and those institutions were at present caring for them. Another point was, that they were taking a few cases from the Boards of Guardians; the money they obtained for them helped to keep some of the other cases. It was the Idiots Act which gave permission for those cases to be received. Another point was that they were very anxious to remain under the Lunacy Commissioners. While that was so they knew where they were; they had great confidence in the fair and just way in which they were supervised, and it was quite certain that those Commissioners understood the institutions and the cases they received. If they were handed over to the brand new authority, which might consist of very eminent men, they did not feel sure that the cases concerned would be fully understood, at least with the same completeness as by the present Lunacy Commissioners. He did not see how an ordinary body of men could have had the experience necessary for that understanding. Moreover, under the Idiots Act they knew what the regulations were, whereas under the new Bill the Secretary of State had

the power to make what regulations he pleased. Dr. Hyslop raised the point about the diminution of voluntary contributions if cases were received. That was the reason they wanted to take some of these cases under the Bill, because they were sure they would lose a certain proportion of the subscriptions. If a certain number of these cases were contracted for, it would do something towards making up for the subscription deficit. Another question was, Why should the education authorities have power to contract with these institutions? One reason was because they often asked the institutions to take their cases now, but they could not because, under the Education Act of 1899, the authority had no power to pay for them in these institutions. A way out of the difficulty would be for these institutions to be certified both under the Idiots Act and the new Bill. But it had been held that if they came under the Idiots Acts they could not come under any other. Clause 8 of the Idiots Act prevented this. It must therefore be made clear in the Bill that they should be allowed to have cases under both Acts if they desired to. They were not asking for compulsory powers, but for permissive powers, *i.e.*, if the authorities wished to send cases to such institutions as he was speaking of, they should have power to do so. That want could be met by adding something to clause 1. There would be a difficulty about dual control, and that would be best met by putting the whole of the control into the hands of the Lunacy Commissioners. But there were at the present time institutions working under two Acts, and if it had to be, he did not doubt that institutions such as his own would manage to survive. The institutions under the Idiots Act had been saving the pockets of the taxpayers for many years by looking after these very cases which were now under discussion, and he contended that in return for that they were deserving of consideration.

Mr. C. H. DEAVIN (Gloucester Poor Law Guardians) said he fully appreciated the opportunity of being present at this meeting. His interest in the subject arose from the fact that terrible results had ensued from the haphazard treatment of most of the feeble-minded, a class of persons who came before guardians more frequently than before other authorities. He had visited a colony which was established for relieving the feeble-minded and epileptic; and it was thought by his col-

leagues and himself that this form of treatment was worthy of being followed. He congratulated the Association on what it was doing in support of the measure. He trusted that before long the Bill would have become law, so that the subject could be dealt with. As the last speaker had well remarked, the main point of this Bill was the question of detention. Unless compulsory detention were provided for, the treatment of the feeble-minded did not amount to very much, because the great object was to stop the source of this feeble-mindedness. It seemed that under this Bill that would be brought about. The question had been raised at that meeting as to what should be the authority under the Bill. For his own district the authority would be the Gloucester City Council. At present they, as guardians, did not agree with that; nor was he sure that they agreed with that Association in the view that the authority should be the Lunacy Commissioners. Still, that was a matter of detail, and he did not doubt that their Poor Law Association would try to safeguard the interests of the guardians in that particular. Probably the vast proportion of those who would come under this Act would be people who would have been a charge on the public rates; therefore he and others thought the guardians should have a considerable say in the matter. Under the Lunacy Act they were responsible for the maintenance of a number of lunatic asylums, and they sometimes felt they had not got sufficient control: under the new Bill it seemed likely that the same would obtain in the case of imbeciles. Experience showed that the subject was being treated on the right lines, but guardians felt they ought to have been consulted on some of the proposed provisions. Yet they hoped that in this present Session of Parliament the Mental Deficiency Bill, with some reasonable alterations, would be passed. He believed the result would be to the benefit of the country generally.

Dr. BOWER said he would first discuss the question of the need for legislation. He did not think there could be any doubt that that need existed, and he found it so in practice. He saw many cases for which he had the greatest difficulty in finding a suitable place, and that applied especially to people of the poorer classes. Institutions existed to which one could send the better classes, but for the poor feeble-minded there was, as yet, no satisfactory provision. Therefore he believed all in the Association were agreed on the first proposition which Dr.

Hyslop made as to the real need for this legislation. They were also agreed as to the composition of the Board of Control; namely, that it ought to have as its nucleus the present Lunacy Commissioners. Dr. Langdon Down had given several cogent reasons, and there were others which would appeal to those who understood the subject if it were thought necessary to mention them. He wished to say also that one had certain fears and misgivings, and he hoped there would be plenty of efficient safeguards, especially in connection with the clause dealing with the prevention of procreation; also in the matter of the local authority. He did not speak with prejudice (as he was a member of a County Council) about the work of looking round the county and rounding-up the deficient and labelling them as mental defectives. And it would be a pity, as Dr. Shuttleworth pointed out—and that applied chiefly to children of the better class, as children of the lower class would go to public schools and would thus be protected—that some of these cases should be labelled as mental defectives early in life, for once the name had been applied it would adhere to them. About eight years ago he was consulted about a young girl who could not be managed at home. He sent her under the care of Dr. Shuttleworth, where she remained a good many years, and she became well enough to enter upon a course of training as a nurse at a general hospital. If she had been labelled feeble-minded earlier in life it would have proved a bar to her entry upon a course of training as a nurse.

Dr. AUDEN (Birmingham) said he would direct his remarks to the relation of the Bill to the local education authority, as there were real difficulties of a practical character in connection with the provisions of the Bill. Under section 13 it was necessary for the local educational authority to carry on, as they had in the past, (1) the work of ascertaining what children in their area were defective within the meaning of this Act; (2) to ascertain which children were educable; and (3)—and this was the point to which he specially wished to direct attention—to notify to the local authority under this Act the names and addresses of defective children who had been ascertained to be not educable, and children discharged from special schools and classes on attaining the age of sixteen. That brought one back to the ever-recurring question of the initial diagnosis which was laid upon school medical officers.

It seemed to him that this new Mental Deficiency Bill enhanced their responsibility. Any school medical officer who had had considerable experience in examining mentally defective children would agree with him that the prime reason why the vast majority of these children were presented to the medical officer for examination was the intellectual difficulty. The children were intellectually backward, and therefore the teachers found them unable to profit by the education given in the classes to which they, under the ordinary Education Acts, had been sent. Those children could fairly readily be divided into two main groups. There was first what he believed to be the larger group, those children whose various faculties were still in a larval condition. It was recognised that the faculties of reading and of forming mathematical concepts were genetically distinct; that children did not all increase in the same respect in these matters in an equal time; that in some children some faculties might remain in a larval state for a long time. He thought experience in the examination of children who were word-blind, or partially so, was in favour of that premiss. He estimated that 20 *per cent.* of the children presented to him for examination had as their difficulty the learning to read. When he examined them and went into their family history, he found, in quite a considerable number of cases, that the father or the mother were regarded as "no scholars." Many of them during their school life had been unable to read, but had acquired the capacity since. And this was equally true of mathematical concepts. Many of the children were presented for special examination because they had shown they could not perform some simple mathematical calculation, such as a subtraction sum. Most of those who could remember their own school days would admit that there were many problems which proved beyond their powers to carry out, the truth being that the brain was not, at that stage, sufficiently developed to carry out the necessary intellectual procedure; but those same processes did not now present the same difficulty. It was now his function to deal with large numbers of statistics, and he felt sure that twenty-five years ago he would have been incapable of performing the mental gymnastics which he now did in the performance of his work. Under the 1899 Act these children were supposed to come under the Epileptic and Defective Children's Act; under the

new Act their names must be sent to the new authority when they reached the age of sixteen. For that reason, as he had said, the responsibility of the school medical officer was much increased. Speaking from memory, he would say that in one given year he had only certified as mentally defective 67 *per cent.* of the children presented for examination by the teachers, the remainder he had sent back into the ordinary schools, believing their intellects to be still in this larval or retarded condition, and what were the results? An investigator told him yesterday that out of 163 only twenty-seven were presented for re-examination as having made no progress, or as showing no improvement in intellectual capabilities. Had he then taken any but a very strict line in refusing to certify those who gave any indication of retardation rather than feeble-mindedness, a good many of these children would under the terms of section 13 have been reported to the new Commission as feeble-minded. What was wanted in our educational curriculum was a term introduced largely on the Continent, particularly in Scandinavia and Germany,⁽¹⁾ namely "feebly gifted." These children whose brains were in a larval condition were "feebly-gifted," but not necessarily "feeble-minded." Another point was that in so many of these children the defect lay not so much in the child, but in the method of teaching and in the regulation of the elementary schools. To take as an example, in the city in which he worked, as soon as a child reached seven years of age it was transferred to the upper school. Some of these children had been ill; others were, mentally, in a larval condition. In consequence they were unable to keep up with their normal fellows, and accordingly within a year of their being sent to the upper school they were reported to him, the speaker, as mental defectives. He was only one of a large number of medical officers to whom that difficulty was presented. It was easy and convenient, especially if there was pressure from the schools and from the committee, to transfer these children to special schools, and thus do them and their parents a serious and lasting injury. The only solution there could be—and that was not under the general terms of the discussion on the present occasion—was what was described in the report discussed on the previous day on the medical inspection of school-children—the provision of some form of observation class before certification. Under the Defective and Epileptic Children's Act, 1899, they

could not send a child to a school for defectives without a certificate. He sent them for three weeks or a month, but no grant was received for them, and it was not therefore possible to keep them longer, for any Committee would naturally look askance at the transference of a number of children to special schools without the financial grant in aid that goes with certification. If some proper and prolonged observation were provided before the children were finally certified as mentally defective, then the new Mental Deficiency Bill would render the special schools observation centres of the highest value.

The second great group was those children who exhibited true mental deficiency, both intellectual and moral. The place where he came across feeble-minded children was the police-court. It fell to his lot to examine children sent by the magistrates to the Remand Home, and therefore he came into contact with children who were not "in cognitive relationship with their environment," and who could not conduct themselves or their affairs with ordinary prudence. These are the cases which should be rightfully reported to the authority under the Bill. As he had already said, with regard to word-blind children, parents who confessed that they were illiterate while at school or throughout life had yet shown, by their ability to earn their living, that they were not mentally defective in the ordinary sense of the term. They were able to conduct themselves with ordinary prudence and compete on ordinary terms with their fellows. That they were feebly gifted would be at once conceded, but not necessarily mentally defective. What he would wish to urge on the education authorities was the provision of these intermediate classes, preferably on the Mannheim system, to which reference is made in the report to which he had alluded.

Dr. GILL said he wished to congratulate Dr. Langdon Down on his able speech, in which he pleaded against the divorce of the Lunacy Commissioners from the authority who were to work this new Bill. They all knew that the public were only too glad, if they could, to put their friends in other places than what were unfortunately called asylums. Under this Bill it seemed that people were going to be given so many opportunities of evading the Lunacy Act of 1890, it was most important that the point should be pressed home that the Lunacy Commissioners should be the authority under it. He was strongly

convinced that the term "mental deficient" should be very strictly defined so as to include only those "defectives" for whom provision had not yet been made, and he trusted that those gentlemen who were so ably watching the matter would devise and try to get accepted some such definition.

Dr. WOLSELEY LEWIS : The Mental Deficiency Bill proposes to set up an entirely new body under the Home Secretary for dealing with mental defectives, and although clause 62 provides for an amalgamation of this body with the Lunacy Commissioners, it is intended that the working of the Act should commence under the control of this newly formed body. Mr. McKenna, in introducing the second reading of the Bill in the House of Commons (June 10th), foreshadows an amalgamation of the two bodies, and also gives reasons why the amalgamated body should be in the Home Secretary's department. He further says it would be invidious for a Home Secretary to introduce a Bill to take away from the Lord Chancellor work which is now so admirably done by him. There are, however, strong reasons, in my opinion, why the Lunacy Commissioners, and especially Medical Lunacy Commissioners, should control the working of the Act from its initiation : (1) Anyone who has read the Mental Deficiency Bill will know that there is much overlapping with the Idiots and Lunacy Acts. Indeed, in clause 47 (4) we find : " Nothing in this section shall apply to or affect any person who, under the Lunacy Acts, 1890 and 1911, or the Idiots Act, 1886, receives or detains any person in accordance with those Acts, notwithstanding that the person so received or detained is a defective within the meaning of this Act." This means, of course, that there are persons who come within the meaning of any of the three Acts ; and they are not a few ! And yet it is proposed to place the carrying out of these Acts in the hands of different central authorities ! A large number of persons liable to be dealt with under this Bill are already under cognisance of the Lunacy Commission, and it will lead to inextricable confusion if the Lunacy Commission has not the administration of the Mental Deficiency Act from its initiation. (2) A study of clause 17 (2), setting out what persons are subject to be dealt with under this Act, shows quite clearly that the determination of the proper persons depends primarily on a diagnosis of mental defect. They must be idiots, imbeciles, feeble-minded, moral

imbeciles or mentally infirm. The administration and initiation of such an Act requires a special knowledge of these conditions. This knowledge the Lunacy Commission has. (3) Clause 8 intends that the existing Asylums Committees of the County Councils shall also be the committees to deal with defectives under this Act, and it will obviously hamper them in their administration if they are responsible to different Government departments for the two classes of persons for whom they have to provide. It will also lead to unnecessary expenditure, as it will make it difficult to maintain a graduated system of institutions (with every facility of transfer from one to the other), which will, no doubt, be found the most efficient and economical method of dealing with the persons for whom the County Councils are liable. That such transfer will be necessary is recognised in clause 29, section 4 of which provides that the Secretary of State may, on the joint recommendation of the Commissioners in Lunacy and the Commissioners under this Act, make regulations for carrying this section into effect. Surely a very cumbrous method of working! This may be entirely dispensed with if the Lunacy Commission have the working of the Act from its initiation. It is provided in the Bill that a county council or county borough shall house and maintain defectives under this Act provided they receive a Government grant of 7s. per head per week, while the Lunacy Act throws the onus of maintenance on the Poor-law authorities, and provides a Government grant of 4s. per head per week. It will thus be seen that, for financial reasons, the person to be dealt with will be a shuttlecock between the county council and the guardians, and, with different central authorities in different Government departments there will be no one to see fair play, with the result that the aforesaid person may be lodged in an institution unsuited to his needs. If the Lunacy Commission was the central authority to deal with all cases they could see that justice was done and that both sides played fair, and that the institution to which a person was allocated was selected on account of his mental requirements rather than for financial considerations. (4) Clause 20 (7) provides that the judicial authority under this Act shall be the same as the specially appointed judicial authority under the Lunacy Acts. It is evident that it will be much easier for such authority to be instructed in the particular

type of institution to which a person should be sent if the Acts were administered by one and the same central body, namely, the Lunacy Commissioners. (5) Clause 42 provides that the Asylum Officers Superannuation Act, 1909, shall apply with certain modifications to the officers appointed under this Act, and it is obvious that there will arise many cases of difficulty under this clause. These can only equitably be settled by appeal to one central body, which appreciates the workings of both the Acts, namely, the Lunacy Commissioners.

Dr. WILLIAM R. DAWSON said he thought it ought to go out quite clearly that all the criticisms to which the meeting had listened did not mean that the Association was in any way unfriendly to the Bill. It was true that the Bill did not cover all the ground which it was hoped it would cover in view of the Report of the Commission on the Care and Control of the Feeble-minded; but yet it dealt with a very considerable part of it, and formed a welcome beginning, which might be extended subsequently to include the whole of the classes with which the Royal Commission had been concerned. Therefore it would be a mistake and a pity if anyone should go away with the idea that the Association was unfriendly to the Bill; it was not. Coming to details, he would remind his hearers that already at the May Meeting the Association had passed a resolution affirming the principle that the Lunacy Commission should form the central authority to deal with those who came under the scope of the Bill. With regard to clause 17 (1) (e), namely, that dealing with the persons who should be deprived of the opportunity of procreating children, and to the definition (17) (2) (c) of feeble-minded persons, he believed that the definitions suggested by Dr. Langdon Down were as good as they were likely to get. It was true that the suggestion with reference to those who should be deprived of the opportunity of procreating children did not cover the whole of the ground, but he considered that it covered 80 *per cent.* of it, and the great point was that it would prevent our workhouses being, as they were now (in the words of Dr. Leeper, who read a paper on the subject before the Association), "State-aided manufactories of lunatics." That was all he proposed to say on the general question. But what he more particularly wanted to urge was the right which they in Ireland possessed of being included in the provisions of this Bill. There could be no question that, if England and Scotland required

provision for the feeble-minded people, Ireland required it to a much greater degree. It had been estimated by the Royal Commission on the Feeble-minded that in England '46 *per cent.* of the population were defectives outside asylums, but in Ireland the corresponding figure was '62 *per cent.* And whereas in England 45 *per cent.* of defectives required immediate provision, in Ireland the proportion was 66 *per cent.*, which was due to the fact that only a single institution for imbeciles and idiots existed in that country, and that was a voluntary institution, which could only take about 100 patients. In Ireland they had no special schools nor any other provision for imbeciles and idiots except the asylums, and therefore he did not think anyone could say they did not require such provision and accommodation. The difficulty about extending this Bill to Ireland had been stated to be the imminence of Home Rule legislation. But supposing the Home Rule Bill became law, such a measure as was now under discussion could not engage the activities and the consideration of the Irish Parliament for a great number of years; there were so many other measures, such as Poor-law reform, main drainage, and so forth, which appealed much more to the general public than did provision for the unfortunate class under discussion, who seem to have so few friends in any country. Therefore if they could not induce the Government to include Ireland in the Bill, there seemed but little prospect of their getting legislation on the subject for many years to come. That being the case, he, as President, had called a special meeting of the Irish Division, and that Division unanimously passed a resolution urging upon the Government that this matter should be dealt with by modifications to the Bill now before them, so that its provisions might be extended to Ireland; and a committee was appointed which drew up a statement explaining the scope of the Bill, which was forwarded to all the Irish Members of Parliament, and to a very large number of public bodies and asylum committees and county councils. The idea had already met with considerable support in the country, though, the question being so recent, all the public bodies had not yet sent their reply to the circular. Some of the asylum committees, however, had passed strongly worded resolutions in a favourable sense; and there had also been a reasonable amount of support, which he hoped would be increased later on, from members of Parliament

belonging to both the Irish parties. What members of the Irish division desired was to have their action endorsed by the general body of the Association, and therefore, with permission, he would give effect to that desire by moving a resolution, *viz.*, "That we, the Medico-Psychological Association of Great Britain and Ireland, cordially endorse the action of our Irish Division in endeavouring to have the provisions of the Mental Deficiency Bill extended to Ireland, and we would urge upon the Government the necessity of introducing into the Bill the modifications necessary for that purpose."

Dr. DRAPES said he had been asked to second the resolution, which he did with pleasure. He did not think it would require much urging upon the Association to back up the members in Ireland in their demand to be admitted to the provisions of this Bill. In a great many instances Ireland had been made a "separate entity," but in this instance he thought that country should not be regarded as such. In Ireland, as in England and all over the world, there were mental defectives, and where there was the same need the same remedy should be made available. Why Ireland was omitted from the Bill he could not say. A measure like this, however, should be taken out of the region of party politics, and they in Ireland should be granted the same rights and privileges as were England and Scotland. The influence of the Medico-Psychological Association was beginning to be felt amongst the general public, and he did not doubt they would look to that Association for some guidance and instruction in matters of this sort. Irishmen would be extremely glad to have the assistance of the general body of the Association in enabling them to participate in the provisions of this Bill.

The PRESIDENT said it would be convenient, at that moment, to take the feeling of the meeting on that point, though he did not intend by that means to limit the general discussion.

The resolution was then put, and carried unanimously.

Dr. NEEDHAM said his words would be very few, but he would like to express the opinion of the Lunacy Commission with reference to the Bill. He thought they looked with the greatest possible dismay upon the passing of the Bill in its present form, because they saw before them a tremendous conflict of authority at every step. Everybody in that room

knew that one could have no line of demarcation between the finer degrees of mental disease; they shaded off into each other by insensible gradations, and it would be very difficult to decide under which category the patients should be placed and under what authority. It was certain that a good number of people who were now under the Lunacy Commission would, if this Bill became an Act, pass under the proposed new authority, and there would be controversies and discussions and difficulties at every stage. Again, there was the question of the 7s. grant for these people, as against the 4s. grant for the ordinary paupers. Was it likely that a local authority, endowed with common-sense and a regard for their pockets, would be willing to send their patients to an institution where they would only have 4s., when they could send them to an institution where they would have 7s.? It was impossible, and if that was so, what was £150,000? Already there were said to be 70,000 people who required to be taken care of. He wished to guard himself strictly against having it supposed that the Commissioners in Lunacy were against the principles of the Bill; they were strongly in favour of them, and very conscious of the extreme necessity which existed for defectives being taken care of in the ways indicated by the Royal Commission. He did not think that Royal Commission ever contemplated the setting up of two opposing authorities. The report of the Royal Commission leaned in the opposite direction, namely, the enlarging of the authority, and the merging of authorities into one Board of Control; not the setting up of two authorities which might have two entirely different standards.

Dr. HAYES NEWINGTON desired to say a word on the point which Dr. Needham had just referred to, and which was definitely settled at the last meeting of the Association. When the Bill was brought in by Mr. McKenna, he distinctly stated the fact that there were two Richards in the field, one old and the other new. Some would agree with the old Richard remaining in, and others would vote for the new one. That was a question to be settled by Parliament. Therefore, as Dr. Langdon Down said, there was no necessity to be pusillanimous about it; they were invited to join in the fight, and they could not be too strong in throwing in their adherence to the old Richard for the reasons given. That had now been

further confirmed by the Association. He wished to emphasise the fact that there was a clear-cut issue laid down by the Home Secretary himself. After this debate, which had been a very far-reaching one, conducted from every point of view, they were in a position to approach their members of Parliament and urge on them the vital importance of supporting the course which the Association so strongly recommended. That would be the most effective way of doing their part. There was another suggestion which he would make, namely, that they must pay more attention to definitions through the Bill. They had one or two which required it—one, especially, with regard to the use of the word “educable.” He knew that even among experts there were two different views as to what “educable” might mean in clause 13 (b), which directed the ascertaining which of such children were educable. It was on that that the existing education authority and the new authority to be created would join issue; it was where they would touch, as Dr. Auden pointed out. Then as to the meaning of the word “defective,” it was used in the most unfortunate sense in clause 17. Much of the Bill applied to defectives. Obviously it was intended to apply only to those defectives who were to be subject to being dealt with under the Bill. To keep registers of defectives subject to be dealt with seemed simple and did not involve great hardship, but if an effective register of all defectives was going to be kept, inquiry must be made as to who were defectives. There might not seem to be much harm in invading the sanctity of a private house on information received to see if a person in it was a lunatic, but when it came to hunting up all possible defectives, it opened up the door to a very unfortunate procedure if local authorities chose to exert such powers. It was not likely, but one had to provide against all contingencies, and the Bill, as he read it, could, under the most unfortunate circumstances, afford much power for evilly disposed persons to make familiar inquiries into households. Another point was that raised by Mr. Deavin, a guardian, as to the guardians being displaced by the county councils under the Bill. As a county councillor himself, he, Dr. Newington, had much sympathy with him as a guardian; but when Parliament gave effect to the report of the Poor Law Commission he feared that worse treatment would be in store for guardians.

Dr. CORNER said so much comment had been made about

the subject of the authority that he would only say, on that point, that he concurred in all the remarks which had been made with regard to the Commissioners in Lunacy being the authority; and that every committee with which he was associated, lay and medical, had unanimously passed resolutions to the effect that there should be but one authority, and that authority should be the Commissioners in Lunacy. Many reasons for this had been adduced—their experience in administration, in the construction of buildings, in the management of large institutions, as well as their special medical and legal knowledge; but there was one other respect in which he thought the Commissioners in Lunacy were especially suited to be an aid, and that was in regard to the duty, which was to be thrown on our shoulders, of separating the feeble-minded from the imbeciles and lunatics on the one hand, and from normal people on the other. That promised to be a very delicate matter, and we would want all the help and sympathy of the Commissioners in Lunacy in endeavouring to carry it out. The meeting had been told about the finance of the Bill, and that £150,000 had been granted by the Government to provide a grant of 7s. per head. This would provide for an administrative department, and, apparently, for about 7,000 defectives; and, as Mr. McKenna had said, cases in asylums and workhouses would be the first to be dealt with, it was clear that they could not look for any financial assistance to provide for the feeble-minded. As had already been pointed out, there was a grant of 7s. per head under this Act, but only a 4s. grant under the Lunacy Act; and, as many lunatics and demented could be included under the definitions of the mentally infirm under this Bill, it was only natural to expect that such cases would be transferred to institutions for defectives. There were, also, all the weak-minded old people in the workhouses who were provided for out of the rates, and it had been declared or suggested that those would come under this Bill, so that the 7s. grant would be a great inducement for Boards of Guardians to transfer such persons to institutions for defectives, with the result that there would be no money left to provide for the cases which urgently needed to be segregated for the protection of society and the next generation. Sections 17 and 25 were, to his mind, the parts of the Bill which required their most serious consideration, for by

those sections they had to define those who could be compulsorily detained. As Dr. Hyslop had already said, a defective must first be a defective within the meaning of this Act, as defined in section 17, subsection ii, but that was not sufficient to enable one to certify and detain the case. No case could be certified unless he was also "subject to this Act," as provided in section 17, subsection i, but evidently there must be considerable change made in this section if it were to be possible to certify all cases who, admittedly, should be subject to the Act, and if they were not to debar other cases from having the benefit of the special care and treatment which was necessary for their condition. It must be admitted that idiots and imbeciles as defined in this Bill should be certifiable under all circumstances, as they were already certifiable under two other Acts of Parliament. When an attempt was made to make idiots or imbeciles subject to this Act one found that there were practically only two clauses under which they could be certified, namely (a) and (e), for idiots and imbeciles were rarely charged with committing offences, and were seldom found in prison; nor were they habitual drunkards, or children discharged from special schools on attaining the age of sixteen years. He invited the meeting to consider the clauses under which these cases could be certified, namely, (a) and (e). A few cases could come under (a) from wandering, or being cruelly treated or neglected, but only quite a few, so that the majority of idiots and imbeciles must be certified under clause (e), which stated it was desirable that they should be deprived of the opportunity of procreating children. Though most imbeciles and many idiots could be certified under this clause, he could not think that this was the intention of the framers of the Bill; and it must not be forgotten that many idiots and some imbeciles were sterile, and so could not be deprived of that which they did not possess. He thought he had said enough to demonstrate that idiots and imbeciles should, under all circumstances, be "subject to this Act." With regard to moral imbeciles, as defined in clause (d), it should be noted that all temporary and mild cases of moral instability occurring during childhood or puberty could be included under this definition; and as these cases were numerous, and the prognosis under proper treatment was very favourable, it was only natural for the parents of such cases to object to their children being certi-

fied alongside idiots and imbeciles. In order to limit this clause to true moral imbeciles, it was necessary to show that the mental defect was permanent, and that the vicious tendencies were habitual, so that before the words "mental defect" he had inserted "permanent," and he had replaced the word "strong" by "habitual." In that way clause (*d*) could be limited to moral imbeciles who were already certifiable under the Lunacy and Idiots Acts, and as their mental defect was permanent, and their vicious tendencies habitual, there could be no objection raised to "moral imbeciles" being made "subject to this Act," like idiots and imbeciles. The mentally infirm persons as defined in clause (*e*) would include not only senile, but all demented and many lunatics; and it was not surprising that this clause should have created anxiety in the minds of the proprietors of houses licensed under the Lunacy Acts. There was a safeguarding clause in the Bill as far as public asylums were concerned, as the Commissioners had power to direct that cases who had become suitable subjects for lunatic asylums might be certified under the Lunacy Acts and placed in such asylums. But on reading the Bill one could not help being struck with the fact that it had been framed to meet difficulties which commonly occurred in public institutions, while only scant attention had been given to the effect which it might have on the welfare of private patients in houses licensed for lunatics and in homes for the feeble-minded. Amongst the mentally infirm persons who were also subject to this Act a few might come under section 17, subsection 1 (*a*), as wandering, etc., very few, chiefly males, under (*b*) as charged with committing an offence, a few, again, might be habitual drunkards under clause (*d*), but it was difficult to see how the majority were to be certified, as women after the climacteric and many senile men could not be certified under clause (*e*). In order to remedy this, in the amended clause which he had proposed, he suggested that mentally infirm persons "subject to be dealt with under this Act," should be those who are (*a*) found wandering about, neglected, or cruelly treated; (*b*) in need of further care and control, or are a source of injury or mischief to themselves or others. He had now considered all the defectives within the meaning of the Act with the exception of the feeble-minded, who, as defined in this Bill, were the borderland cases between imbeciles and the normal. He did

not find much fault with this definition, except that plainly it could not apply to feeble-minded children, as it referred to "persons who may be capable of earning their living under favourable circumstances," and children could not be expected to be capable of earning a living. If that was to be the definition of "feeble-minded persons" within the meaning of this Act, it was important to realise that this would include all high-grade cases, however slight or temporary their mental defect, and these high-grade cases might all be made subject to this Act if (c) was to be retained in the Bill. This made it clear that the mildest cases, as well as patients suffering from slight and temporary psychoses during childhood, puberty, etc., were subject to this Bill, and must be certified in the same way as idiots and imbeciles in order to receive proper treatment. It was hardly necessary to say that parents of the middle and upper classes would object to this, and would do all in their power to avoid certification by placing these highest-grade cases in farms and in country houses, where they might possibly escape supervision and registration, but they would not get the proper treatment and training, nor the supervision which was necessary, with the result that, from the eugenic point of view, the Bill would defeat its own object. Dr. Hyslop had pointed out that there were exceptions to the saying, "Once a defective always a defective"; he would go further, and say there were many exceptions. These cases had, in the past, placed themselves voluntarily under special training, and in the case of children had been so placed by their parents, with the result that many had improved sufficiently to earn a living in the outside world, while others could be taught dairy and poultry farming, horticulture, and the management of bees, as well as such subjects as book-keeping, shorthand and commercial correspondence. Many could learn these occupations but had not the business capacity or strength of character to carry them on successfully in the outside world, and in his opinion such cases should not be certified with idiots and imbeciles, while the majority of them would go voluntarily into suitable homes, to be trained or to live. When introducing this Bill, Mr. McKenna emphasised the fact that the feeble-minded, when placed in suitable homes, were contented and happy and did not wish to leave, although the doors were open. If that were the fact it was the strongest argument which could be pro-

duced in favour of extending the privileges which voluntary boarders enjoyed under the Lunacy Act, and giving the same privilege to cases which were feeble-minded and not subject to this Act. With the object of permitting the voluntary admission of suitable cases to certified houses and institutions, he had revised clause 17 so as to make all low-grade cases who were certifiable under other Acts subjects to be dealt with under this Act, and had introduced clauses which would enable feeble-minded persons who were over twenty-one years of age and not subject to this Act to place themselves voluntarily in certified houses and institutions, and also to allow the parents or guardians of similar cases to place feeble-minded persons under twenty-one years of age in certified houses or institutions without their being certified as defective. He knew that this change in the Bill would be welcomed by the high-grade feeble-minded, and still more so by the parents of such cases, and in his own mind he was confident that the combination of compulsory certification and detention, with voluntary treatment and control, would make a far more efficient machine for solving this great problem than would compulsory certification in all cases. In further reference to section 17 (1), clause (e) made people subject to this Act because it was in the interests of the nation that they should be deprived of the opportunity of procreating children. His sympathy was with the Government in their effort to prevent the propagation of the unfit, but this clause seemed to him to be one which would arouse considerable opposition, and, as stated by the National Association for the Feeble-Minded, and also by the Medico-Psychological Association's Special Committee, it was too vague for an Act of Parliament, and would probably lead to much litigation. After all this clause would only be helpful to certify cases which were near the normal, and he asked whether medical men would certify such cases under section 17 (1) (e) and run the risk of having an action brought against them. There was also the question of what to do with sterile cases who could not be certified under this clause. In connection with this he submitted the following points: (1) Many idiots and some imbeciles were sterile, and could not be certified under (e); (2) amongst the mentally infirm persons women after the climacteric and many senile men could not be certified under this clause; (3) should cases who had been certified under clause (e) be discharged when

they became sterile, such as women after the climacteric and men in senility?; (4) could cases exclude themselves from clause (e) by bring voluntarily sterilised? Those were all questions which would have to be considered if that clause were to be retained in the Bill. The last point was one on which he would not dilate, but simply express surprise that the Government should have taken so much pains and elaborated so much complicated machinery in order to certify and deprive people of their liberty, and yet had apparently neglected to consider the question of their discharge, for there was no proper provision for the discharge of patients in the Bill. It was only mentioned in two places, and came under the regulations which the Secretary of State was empowered to make after the Bill was passed. Surely if Parliament were asked to support a Bill which took away the liberty of people who were so near the normal as were those dealt with in the Bill, clauses to regulate revision and discharge should be inserted in the Bill.

Dr. MIDDLEMASS said he did not propose to take up the time of the meeting by any prolongation of the discussion. He rose in order to get the benefit of the discussion conveyed to those whom it was hoped to influence. The Association was glad to have had present the Commissioners in Lunacy, and it was felt that they had lent a sympathetic ear to the debate. He regretted that persons whom they would have liked to have present were not there, and his purpose was to have conveyed to those individuals the purport of the discussion. He therefore proposed the following motion: "That a deputation, to be chosen by the President, Past-President, and President-Elect, be appointed to wait on the Home Secretary, and any other Government official whom it is thought desirable to interview, to lay before them the views of this Association, so far as they have been expressed, respecting the Mental Deficiency Bill." At the present time one had an unfortunate example of the results which might follow from absence of consultation between Government officials and the profession, and that, he thought, was not the only instance where the views of the medical profession might have obtained more weight with the Government if they had been expressed in time. He thought the meeting would agree with him that the views of the profession on this Bill should be laid before the responsible officials in time to be considered before the Bill received its ultimate shape.

Dr. McRAE seconded the resolution, and it was carried unanimously.

The PRESIDENT said there had been a most interesting and full discussion upon that very important subject, and it was owing to Dr. Hyslop and his method of introducing the subject that the discussion had taken the line it had. It had been most useful to those present: for some in getting information, and for others in crystallising the opinions which were more or less vaguely floating about in their minds. He thanked Dr. Hyslop in their name, and asked him to reply.

Dr. HYSLOP, in reply, said he had to thank the President for his kind words, and his audience for the way in which they had treated the subject. There had been no waste of time over minor details, which details would necessarily be brought up in the Committee stage of the Bill. He did not doubt that the proposals for certification would be gradually modified, and the definitions would be more completely laid down, so as to avoid causing a scare. He thought that scare was more or less universal, even in the House of Commons itself. One night, after a Committee, they were sitting at dinner, and a Member came and said: "What are you talking about?" The answer was, "About defectives." The Member significantly turned on his heel and said to the waiter: "Will you find me a safe seat?" With regard to the question of procreation by the feeble-minded, the feeling had been very strong in some quarters that this should be limited in some way, hence the following saving clause was suggested: "That in addition to the mental deficiency, and being subject to the Act, there should be some good causes, such as heritable disease, such as syphilis, tubercle, and the like, and such other conditions as may be specified by the Commissioners and supported by the Secretary of State." If they were willing to concede that, and also further to define mental deficiency, it might possibly in some quarters meet with acceptance. Whether this clause, such as it is, would be accepted and passed, or whether it would prove to be a source of great objection to the public generally, remained to be seen. Dr. Auden raised the question of those who were educable. There had been several recommendations which would be incorporated in the agenda for consideration during the Committee stage, and the points which he had mentioned were already under consideration.

He was sure Dr. Turner understood, in connection with idiot institutions, that what he pointed out was done advisedly, so as to give an opportunity of removing those objections, which he knew Dr. Turner could do much to remove, and in such a way that the people who had raised the objections would be quite satisfied. All members of that Association were undoubtedly very much in sympathy with the claims of idiot institutions. The £150,000 was offered as a sop, he did not doubt, to various local authorities, and to relieve their minds and smooth over the difficulties connected with bringing in measures which were going to involve a good deal of financial worry and possibly strain. In addition, it was used as a hook or bait to land the Lunacy Commission in the Home Office. It remained to be seen, however, whether the bait was really going to be swallowed. It would have saved a good deal of difficulty if there had been no mention of the amount, because it was ludicrously small, inasmuch as it would only provide for about 6,000; and he believed Ireland alone would supply enough defectives to use up the whole of the grant. One might say the same with regard to the imbecile institutions, and if they took into consideration those who were to be discarded from the prisons, penitentiaries and schools, it would readily be seen that there would not be enough money to provide for or subsidise those defectives already under care, and that nothing would be left for those for whom legislation was imperatively demanded, namely, those who at the present time were unprotected, and were a source of danger to the general public. This sum of £150,000 had caused much dissension and difficulty, and so far as the provision itself was concerned, it would perhaps have caused less difficulty had there been no Governmental grant at all. How it had proved a bait was that the voting of a Government grant, no matter how small the amount, necessitated that there should be a responsible minister who could answer to the Government as to the employment of that fund. Hence it had been said, "Here we have a Home Office, we have a minister who shall be responsible for the utilisation of the Government grant, therefore let the Commission come over to us." Asylum officers were absolutely loyal to the present Commissioners, and there had never been any variation in opinion so far as they were concerned; the members of the Association desired that the present Commissioners should retain

control. With regard to Ireland and its claims for inclusion in the Bill he was in complete sympathy, and the memorandum drawn up by the Irish Division and the suggestion that a new clause 62 relating to Ireland should be incorporated in the Bill would, he had no doubt, meet with the approval and support of the Medico-Psychological Association. In conclusion, he proposed that to the Special Committee to watch over this Bill there should be added Dr. Corner and Dr. Douglas Turner.

Dr. HAYES NEWINGTON seconded the proposition, and it was carried.

(¹) *Schwachbegabte*; in Norway *Svaktbegavede* is contrasted with *aandsvake*—"mentally defective."

Dementia Præcox in Relation to Apraxia. By ROBERT JONES, M.D.Lond., F.R.C.P.Lond.

THE above was the subject or text of the Presidential Address delivered by Dr. Mabilie, the Medical Director of the Asylum at La Rochelle, in France, on the occasion of a Congress of the French-speaking alienists at Tunis in April, 1912.

The address has suggested the following criticisms, primarily I may say with the view of simplifying, if possible, the pathological and clinical aspects discussed, also of justifying, if this be necessary, the relationship suggested between these conditions, and finally, to point out the view taken of the origin of Apraxia by the French school of neurologists and psychiatrists.

It is inevitable that with the progress of knowledge new terms should be invented or selected to describe and to define any knowledge which may have been freshly acquired, or any observations which may have been newly recorded. But it is unfortunate that many of the terms used in medical science should give offence, not only because they fail to convey a definite and strictly limited meaning, but also because they jar and grate upon the ear of the pedant.

Sufficient has been said in this Journal and elsewhere in regard to the use of the term "*dementia præcox*," which has

been well described as an "ataxia" between concepts and the affective division of mind, giving rise to an inadequate emotional tone, or to what is better described as emotional atrophy; but the term "apraxia," though less frequently used, has also received various interpretations. It was first used by A. Starr a quarter of a century ago, and then in relation to agnosia. The latter term implied an inability to recognise an object, because of a dissociation of the sensory centres from each other, or from the higher psychical centre in the pre-frontal lobe; whereas apraxia implied inability to use the object because of this failure in its recognition. Upon this interpretation apraxia is dependent upon agnosia, apraxia representing on the motor side what agnosia corresponds to on the sensory. In agnosia there is stated to be a loss of the understanding (or perception) of the nature of things, while pure tactile and other sensations are still preserved. The primary memory picture of an object is preserved and persists, whilst the secondary sensory identification is absent or disturbed. Physiologically expressed, agnosia is the difficulty experienced in recognising cortical sensory impressions owing to an interruption between the memory centre and the sensory centre in the cortex.

Monakow, Pick, Marie, Rhein and especially Dr. S. A. K. Wilson have written fully upon the subject of apraxia, and the term has been variously defined by almost each author. Some authors have described both a sensory and a motor form of apraxia. By some—Monakow for instance—sensory apraxia is used as equivalent to agnosia, and Pick has further described a form known as ideatory apraxia, which he considers to be always of bilateral origin, and to be manifested during voluntary effort in the performance of certain complicated acts. More recently, and within the last seven or eight years, a new meaning attaches to both agnosia and apraxia, owing to the researches of Liepmann of Berlin. He considers agnosia to be the failure of recognition of an object, whilst common sensation in regard to it is fully preserved. A coin is held in the hand; its weight, colour and shape are appreciated, but it remains unrecognised. He considers apraxia to be the condition a person may experience when able to recognise an object—a watch, for instance, or a banana—as well as its use, but is still unable to put it to its common use by any voluntary effort; that is, in Liepmann's opinion, the apraxic person is not

necessarily agnosic. Although in the apraxic there is no loss of motion—the limbs being readily moved, and there is no wasting of the muscles—innervation being intact, there is yet complete inability to move the leg or arm as the will may command or direct, and the proper and general use of the object contemplated is impossible of attainment.

In one of Liepmann's cases both agnosia and apraxia were associated. For instance, when the eyes were closed there was no knowledge of the position of the right arm. This was not the case when the eyes were open and the aid of sight was possible; then the patient succeeded in surmounting the difficulty and became eu-praxic.

Difficulty in performing voluntary actions is distinguished from inability by the use of the term "dyspraxia," and when purposeful movements are unaffected the term "eupraxia" has been used. Speaking generally apraxia implies an inability to effect a purposeful movement, through an incapacity to form a clear idea of the movement desired, although there is no inco-ordination or paralysis.

In Liepmann's special case, which is generally quoted as the basis of the latest conception of apraxia, there were subcortical lesions between the frontal and Rolandic area, also between the parietal and the Rolandic area, as well as between the latter and the corpus callosum.

I have observed the condition described in several senile cases suffering from dementia, and recently in a male patient in the early stage of general paralysis, the disease being made evident somewhat suddenly by the occurrence of a congestive seizure, but he has temporarily recovered from the direct motor effects of the fit. At present there is little impairment of the reasoning powers and none of sensation; his general conversation is now coherent and intelligent. Neither is there any loss of the sense of location; but he is unable to carry out simple co-ordinated movements which may be of a complex character, especially such as may have an end or object. He cannot button his waistcoat or lace his boots; he cannot fasten his shirt and collar, and cannot fix his braces, although he puts on his garments and knows their proper sequence. I have also quite recently under my care a case of typical ideational apraxia in a man, æt. 56, with commencing but well-marked arterio-sclerosis. There is "short-circuiting" of ideas, and the form of "apraxia by

anticipation " is very evident. The patient believes all the time that he is performing the right act, although there is complete inability to do so.

The most common forms of apraxia are found in persons with vascular lesions of the nature of an embolus, which implies a more complete cutting off of a group of neurons from their normal associations than is the case in thrombotic lesions consequent upon arterial degeneration as met with in senility, or as occurs in syphilitic endarteritis. On the mental side there is in apraxia a deficient power of concentration and a failure of the attention, and the condition is well known in a variety of lesions without much uniformity. It is found, for instance, in some cerebellar lesions; in association with cerebral tumours, internal hydrocephalus, in certain forms of insanity, particularly in post-epileptic phenomena and in some who suffer from severe obsessions, also in those who suffer from the variety of dementia known as primary or precocious; also after great exhaustion, as in some cases of melancholia; in cases of hemiplegia, and in senile dementia with arterio-sclerosis in the early period of involution, also in some cases of general paralysis. The French school, with Marie at its head, regards apraxia as due to an intellectual deficit, to some affection of the intellectual powers and as being in the main psychic in its explanation. The psychic element is certainly important, and has not received the attention and study it deserves. It is definitely known that loss of perception may be connected with a false interpretation. For this reason the present consideration of Dr. Mabilie's address may be timely and appropriate.

Possibly the most typical form of apraxia would be that following an attack of left hemiplegia (Liepmann states it is rarely bilateral), where the lesion is an embolus or a hæmorrhage in the right Rolandic area. Such a lesion destroys not only the power of voluntary movement in the left arm and leg, but may also destroy the power to perform certain voluntary movements in the right arm, such, for example, as the execution of a purposeful and accustomed act already referred to in my case. Ordinary movements on the right side are unimpaired and motor memories in regard to them are preserved, but they are not sufficiently connected with the other cortical neurons to permit of complex and voluntary acts being put into execution, *i.e.*, there is a dissociation between the motor memories

and ideatory processes. In left hemiplegia there is no loss of power on the right side corresponding to the paralysis on the left, but there may be apraxia—an inability, or dyspraxia—a difficulty in performing voluntary acts on the same side as the lesion. There is thus in motor apraxia from this cause a dissociation of the kinetic memories by reason of an organic focal lesion, and the loss of voluntary power on the right side is probably due to some interruption of the commissural fibres connecting corresponding portions of the opposite hemisphere. This voluntary impairment applies more particularly to the action of groups of muscles, and especially when the acts are in series and somewhat complex, *e.g.*, the loosening of a knot, lacing one's boots, buttoning one's clothes, or lighting a cigarette. The anatomical lesion in apraxia is thus an interruption of one or the other of the groups of association fibres or those described as commissural. There are, as we know, five more or less well-defined groups of association fibres in the brain, the fronto-occipital or superior longitudinal bundle, the fronto-temporal or inferior, the girdle-fibres round the corpus callosum, those which have a perpendicular direction, and the short fibres connecting adjacent convolutions. Liepmann believes there is a centre in the frontal lobes for the execution of complex motor movements, and that a destruction of the left frontal lobe may cause apraxia. It is admitted, I think, that to the left side of the brain is generally ascribed precedence over the right (in right-handed persons) for the direction of movements in manipulative actions.

We know that every part of the brain cortex in one hemisphere corresponds to, and communicates with, identical parts in the other through the commissural fibres of the corpus callosum, and we believe that every movement performed by neurons in the Rolandic area has its image or picture—its kinæsthetic equivalent—in the frontal or prefrontal lobe. By an effort of the will this picture can be revived in memory, and the movements which caused it may also be voluntarily repeated. This presupposes that the commissural fibres between corresponding parts of opposite hemispheres are intact. These fibres are usually described as of four kinds, those of the corpus callosum, which are direct prolongations of collaterals or axis-cylinder processes from projection fibres. When any part of the cortex is destroyed by a thrombotic lesion, an embolism or a tumour,

some of these fibres always undergo degeneration, and according to most authorities who have described cases of apraxia the destruction of some part of the corpus callosum plays a definite and distinct part in its pathology—a view, however, which has not been assented to by Monakow. Then there are commissural fibres of the anterior commissure between the temporal lobes, also those between opposite hippocampal convolutions (psalterium), and those belonging to the olfactory region (fornix). In typical motor apraxia some of the commissural strands described above are always interrupted, and the barrier or lesion separates their cortical origin from their final terminations.

I have said enough about apraxia to bring me to Dr. Mabile's address, which was based upon considerable experience and which introduced many points of interest, such, for example, as the question of "perseveration," the power of the "will" and its possible tract within the brain, the influence of obsessions, the delayed mental reaction, and the relation of the will to the memory in cases of dementia precox or primary dementia.

The address referred to relied mainly upon one case, which, although quoted *in extenso*, was yet incomplete in so far as it had not terminated, and no opportunity had occurred for describing the minute anatomy of the brain. The case was somewhat of an enigma from the point of view of diagnosis, but the main features were briefly as follows:

A student, æt. 30, consulted the President for "an affection of the will" which had commenced some years since, and still persisted. The case was described as a conscientious, hard-working undergraduate, who obtained a poor degree after two or three checks, but in this it was believed he was badly rewarded for his industry. As to his mental state he was evidently not highly endowed, and he was the object of occasional satire and mirth to his fellow-students. He had no hobbies or curiosity outside his work, and he took little interest in music, reading, politics, or games. His remote memory was described as relatively faithful, but his recent memory was bad, his power of attention and of concentration were feeble, his judgment was fair for simple facts, and he had no hallucinations or delusions. His bodily state was satisfac-

tory. The urinary system, also the respiratory, cardiac, and digestive systems were all normal. His muscular system was peculiar. In regard to simple movements such as raising the arm or opening the eyes, when the order was given for these, there was no response for 5 to 60 seconds, and until the actual movements were produced he did not modify his position. The movements, when elicited, were precise, quick, and took place quite suddenly, attaining their maximum quickness from the commencement—there was no poising, deliberation or time of effort. In regard to complex movements in series, adaptive to an end and requiring co-ordination, there was a pause. He got up like a Dutch doll, in a series of jerks, his movements being interrupted. He sat up in bed, first on his elbows, then on his haunches, there he remained for a time, then got his feet out of bed, again deliberated, and eventually stood up. Asked to get up and pick a pencil off the table, he rises, then pauses, then picks up the pencil quickly after a definite pause. There was a tendency to decompose a total act into its fragmentary stages. The duration of acts was not measured by their complexity; the same time was taken to open the eyes as to pick up a pencil; sometimes the simplest act was the longest. His mother once asked him to open his eyes at 7 a.m., but he could not do so before 1 p.m. He could walk, play the piano, write letters of his own accord and in the usual manner. If asked to copy he took a long time, and when he started on anything it was as difficult to stop as to act. He once made his scalp bleed because he could not stop brushing his hair. Here the symptom of "per-severation" was noted.

Passive movements of the limbs were easy, and their tone and mechanical excitability were good. There was no sign of recent or past paralysis. The reflexes—knee, plantar, and pupillary—were normal. There was no "Babinski" and no "Rombergism." Sensation, cutaneous and deep, was normal. Sense of location normal. Heat and cold sensation normal, and there were no trophic troubles. His sleep was good, and he stated he would be exactly like others if only "I had control of my will." What he really complained of was: "I can't act freely." His ideas were expressed slowly, and as if after laborious maturation. He was awake at six in the morning, but could not open his eyes for an hour to an hour and a half.

He commenced to dress at eight in the morning, and finished at four in the afternoon. When in the streets he would avoid obstacles, but could not pass street corners or cross the road. To dress, eat and drink took the whole day, and once after he had used his pocket-handkerchief he kept it on his nose for four hours. His general appearance was sad, and he related his condition in misery. He took a long interval before giving his answers, but he understood perfectly, as he answered correctly. He seemed to be in a state of fixed meditation before he could perform any act. He betrayed no emotion, and often sat in his chair in a state of immobility as if screwed to it. There appeared some "stereotypy."

The condition he was in was believed by his friends to have been caused by the shock, some five years previously, of having been taken home and put to bed by "friends" after a party, when his sense of direction was convivially impaired, and these friends of his student days rewarded themselves by taking away his clothes. He was soon afterwards seized with an indescribable fear. He could find in his room no cause for this. He could not leave his room by any effort, and he was mistrustful about remaining in it. He got distracted, could not remember what he read, and the least mental or physical exertion fatigued him. He felt unable to do anything until he had washed, and this he did constantly and almost continuously. After intense emotional disturbance his "fears" gave way to this obsession about being clean. His condition remained one of absolute paralysis of the will-power.

There is no antecedent history in the case apart from a broken leg at seven years of age, and one attack of articular rheumatism during his period of military service. There is no family history of insanity or neurosis.

Such a case presents several clinical symptoms which are well known in the synthetic affection termed "dementia præcox." The retardation of mental reaction certainly suggests "ideational dyspraxia," and the symptom known as "perseveration" shows the persistence of obsessions and their overwhelming influence and power to retard or to paralyse the will. The impediment to the action of the will and its obstruction or interruption in this case furnishes adequate reason for the term "psychic hindrance," which was applied to it by Finzi and Vedrani, as also the phrase "damming the will" which

was applied to it by Kraepelin. The description "apraxia by suspension," given by M. Dromard to the state when, owing to inattention, the ordinary actions are suspended at any point in their execution, corresponds to that found in Dr. Mabillet's case, and for which two explanations may be offered: Firstly, the full possession of the mind by an unduly powerful impression or obsession which overshadows any other motive to action, and which consequently inhibits the original mental process by acting as a strong distraction, and, secondly, the inhibition of an act because the directing idea has vanished. The person has ceased to hold in his memory the final representation of the end to be attained, and action is consequently suspended. The question whether the memory only is at fault, or whether the attention be deficient, was raised in this case.

The fully developed condition certainly favours the diagnosis of dementia præcox, in which there is "inadequate emotional tone," yet the elementary emotions of fright, pleasure, anger, shame, etc., are often unaffected: the apathy, loss of will-power, the retarded mental reaction, the loss of intellectual activity, and the general unemotionalism, all mark it as of this description, though, as Dr. Mabillet suggests, the loss of will-power or abulia is characteristic also of psychasthenia, hysteria, and melancholia. The early appearance of anxiety and depression would tend to favour the latter form of insanity, whereas the accentuated emotional disturbance points to an exhaustion psychosis or neurosis. In abulia from obsession action ceases, because the patient's attention has been drawn away by something he has not chosen, and imperative ideas, obsessions or phobias are all of this kind.

If one examines any voluntary act it is found to be in itself different from a reflex or an impulsive one: there is in it firstly the cognitive stage, involving an idea of the end to be attained. An image of the aim or end is present in the mind, also images of the movements necessary for securing this end. Then a desire for the end is present, which implies an aversion from present experience and an appetite (as it is called) towards the desired end. This is the conative factor which prompts to the act. The desire is always associated either with a painful feeling, so long as the desired experience exists unattained, or a pleasurable one, when the act is in process of

accomplishment, and the difference between these two emotional states develops into an activity within the field of consciousness to the exclusion of all other thought. If instead of the voluntary activity there is a loss of memory for the desired end, or the presence of a diffused activity with a strongly painful emotional tone, then the will is affected, action is suspended in the conflict, and inaction results; but the affection of the will in melancholia is a true motor abulia, in obsession it is the result of conflict, the will is checked by hesitations and doubts; and when psychasthenia is present there is inattention and a failure of mental concentration. In cases of psychasthenia as well as in melancholia the emotional aspect is intense, but in dementia præcox on the other hand emotion is absent and the movements are "stereotyped." There is no emotion, but there are indifference and apathy. The patient in melancholia falls into a morose indifference, but in dementia præcox the indifference is "unemotional" and the patient neither cares for himself nor others, and he is in a state of true lethargy. The indifference of the psychasthenic, on the one hand, is being constantly criticised and deplored by himself; he consults a number of doctors many times over until they are absolutely weary of him. All these persons may pass off as eccentrics or as persons with a mental "tic," and they perform strange acts in public in an automatic irresponsible manner, without heed or reflection. It needs the physician of wide experience to classify them. The patient described by Dr. Mabile was conscious of his state, and he recognised his subjective insufficiency. A knowledge of this insufficiency creates agitation and diffuse anxiety. The mind, by means of the power of attention, is able to concentrate upon itself introspectively, and is conscious of having forced upon it doubts and hesitations against which precautions are being taken; the will is thus checked and becomes incapable of directing the conative tendencies on normal lines. Without attention all the elements of mind are in a state of flux or molecular disintegration. The cognitive faculty is unable to apprehend reality owing to a deficiency in the focussing power of the mind, *viz.*, apperception, which is the power to unify in one composition new sensations and past memories. Normal apperception synthesises the numerous full and complex elements of consciousness into one whole, and in insanity this may be impossible or only

delayed. In this case simple or reflex acts were correctly interpreted, but complex acts forced a doubt, hence the dreamy indifference, the state of reverie, musings and automatism. This condition is typical of primary dementia as it is of psychasthenia; the highest level of mental efficiency is wanting in both, attention fails, beliefs are impossible of being sustained, a state of unreality results, and there is a difficulty in assimilating new perceptions. In psychasthenia the obsessions usually come from within and relate to the personality, to his actions or to his ideas. In hysteria the fixed ideas are usually from without. It is not related by Dr. Mabilie whether Freud's method of psycho-analysis was attempted or not. The French school of Pierre Janet and others might have explained the obsessions, not as a cognitive defect, but as a rise of morbid factors or a "morbid constellation" as he has termed it, a conflict between the personality and some repressed complex in the patient's past life, owing possibly to some affective shock, but no "irradiations" from any morbid complex and no antagonistic movements appeared in this case, although there was a distinct loss of objective interest and power of concentration, indicating a weakening of the "will." Dr. Mabilie raises one very important point, and that is, "What is the cause of the difficulty to realise, 'I wish?'."

Let us for a moment digress to consider the anatomical pathway of the "will," in order, if possible, to locate the delayed reaction. It is admitted that all conscious processes take place in the cerebral cortex. In this cortex we know sensory tracts end and motor ones begin. Within the same cortex also travel the association fibres connecting them. Similar association fibres, as we have seen, unite two or more areas of the cortex which are of different functional significance, and although sensory fibres may arborise round motor neurons, the probability is, as can be demonstrated microscopically, that trans-cortical or intercalary neurons connect the two. Flechsig, by his special staining of the white matter, has shown that the first movements effected (*viz.*, those connected with sense impressions through deglutition, respiration and circulation) are carried out reflexly, the tracts served by these movements being the first to medullate or to obtain their insulating covering of phosphuretted fat; then follows the medullation of sensori-motor tracts connected with the sense of voluntary

effort and desire. When a group of muscles contract to cause movements the memory of them is stored as a kinæsthetic memory-picture, the neurons connected with the central motor tracts having the specific property of preserving impressions which can be reproduced as images. Images of sound waves are stored for instance as memories in the superior temporal convolutions, visual images in the calcarine area of the occipital lobe, taste and smell in the uncinata and hippocampal areas, and speech memories in the posterior third of the lowest left frontal convolution. All these different kinds of memories are stored in spatially separated portions of the cortex, but they are connected with one another by association fibres in the same hemisphere and by commissural fibres with the opposite hemisphere. It is further known that visual speech is located in the angular gyrus and heard speech in the supra-marginal area. Any affection involving the neurons or the fibres in these centres also affects the power of speech, so far as word-deafness and word-blindness are concerned, that is, there is mind-blindness—the patient sees and hears, but is unable to recognise words or objects seen or heard. In several cases of apraxia in which the morbid anatomy has been described after death, lesions of these areas have been noted. By association all senses, as well as their memory pictures, are able voluntarily to elicit movement. When these memory-pictures are associated together they give rise to ideas, and these form the logical processes of thought. The sum total of all these associations at any particular moment—together with new impressions entering the cortex—form the content of consciousness. If they do not reach the threshold of consciousness they are unconscious images. The cortex is full of such unconscious impressions; dreams, reverie, musings, are of this class. The will through attention is able to fix the mind upon any of these, but when attention is feeble, confused images bring about ideational apraxia. The chief factor in “adaptation to environment” is the power of “attention,” for objects which are not attended to and which do not excite the affective reaction cannot permit the adequate and necessary selection of intellectual associations. When, even in spite of effort, memories are slow in reproduction, the ideas representing them in muscular movements are also delayed and a condition described as “psychic impediment” or “barrage of the will” is experienced, a state

met with in hysteria, melancholia, obsessional insanity and particularly in dementia præcox, in which a lengthening of the normal reaction time is characteristic. The patient here described was able ultimately to perform all the movements requested of him and without substitution or change ; they were performed in their entirety and correctly, and the title "apraxia by suspension" is applied by M. Dromard to the condition. The movements in some apraxic cases appear to be purposeless and amorphous, *i.e.*, the direction may be wrong and the form of movement inappropriate, although the patient believes them to be correct ; but in this case there was only a delay, the movements were perfectly and properly completed in their integrity, but when once started he could not readily cease the movements, the condition described and well known as "tonic perseveration" obtaining. In regard to this condition Monakow states that the sense of muscle position or the muscle sense is in the parietal region of the brain, but Liepman prefers to locate it in the motorium or the ascending parietal lobe. When an impulse is conveyed to this region it persists after the normal stimulus has ceased to act, owing to some pathological interference or "blocking" of the synapse.

The case is certainly a most interesting one and worthy of comment, as it points out the possibility of dissolution of separate mental faculties, *viz.*, those of the attention, the will and memory, a condition which has been described as partial dementia. Possibly it is not one of true apraxia, as there was not "complete impossibility to realise movements adapted to the end proposed." It is probably also not one of ideational apraxia as the understanding was not affected, but, as suggested by Dr. Mabile, one of apraxia by suspension or ideational inertia. It is by "stereotypy" of movements, by its unemotionalism and by the impairment of voluntary effort, more characteristic of dementia præcox or primary dementia than of obsessional insanity or psychasthenia, and it is less suggestive of hysteria or of simple melancholia than it is of primary dementia.

The pathology of this state is involved in much obscurity. The published results of Messrs. Waldemar Koch and Sydney A. Mann suggest no marked chemical changes so far as the phosphorus elements of the brain are concerned, but the neutral sulphur showed a great diminution, while the inorganic and protein sulphur is relatively increased, indicating a general

bodily inherent deficiency for oxidation processes. Pighini also confirmed this research, for he found an increase of neutral sulphur associated with the same disease. Microscopic observations have indicated a feeble appearance of Nissl pattern in the large pyramidal Betz cells of the ascending frontal convolutions and the nucleus of the cells was eccentrically placed. In other recorded observations there was also an increased local proliferation of the neuroglia nuclei. The same degenerative changes were noted also in the smaller and medium-sized pyramidal cells of the cortex. Microscopic examination of thirty cases of cerebro-spinal fluid in this disease by Dr. Harper-Smith reported no organism and no cells in the centrifuged deposit of the fluid. The test for proteins was also negative in all the cases. Yet there must be some metabolic toxins connected with the decay of the large pyramidal cells. In the case under review the only suggestion made by Dr. Mabile is a selective lesion of the neurons co-ordinating the representation of an act with its execution, and it would seem at present impossible to describe more clearly such a diffuse lesion as must occur among the very delicate cortical cells and their processes. It is a reflection upon our pathology that so grave an affection of the will, of the memory and of the attention should remain hitherto undescribed and undiscovered.

A Report on the Conditions of the Lunacy Service and of the Teaching of Psychiatric Medicine in Germany.

By R. G. ROWS, M.D., Lancaster.

THE position of the assistant physicians in the German asylum service and the conditions under which they worked were investigated by a Committee of the German Society for Psychiatry in 1908. In January of that year a meeting was held in Berlin at which Dr. Hans Wachsmuth introduced the subject under the title "Conditions of the Medical Service in Asylums—Independence of consulting physicians (Oberärzte) and hospital physicians (Abtheilungsärzte) and the duties of the assistant physician (Assistenzärzte)." This paper was published in the *Psychiatrisch-Neurologische Wochenschrift* in February, 1908, and in a letter which I received recently from

Dr. Wachsmuth he stated that considerable improvement in the service had been made during the past four years.

The causes which had given rise to dissatisfaction with the service were: (1) The poor pay; (2) living in; (3) want of independence and responsibility; (4) important matters being discussed with the head attendant or matron and decided without the assistant physician being consulted at all (Dr. Hopf, Potsdam). Of these the poor pay and the want of independence, even after long service, were considered the most important. Comparing the men in the asylum service with others who had received a thorough academic training, he showed that most of the latter have a much more independent position than the asylum assistant physician, and he suggested that this lack of independence could be rectified by the combined effort and mutual goodwill of superintendent and assistant physician. He pointed out that asylums at present are too large. They are so large that it is impossible for one man to direct the medical work and also the administrative department. At present the assistant physicians must of necessity be independent *de facto* but they are not *de jure*. The amount of independence will vary under different conditions, but it will be established when a large legal, civil and administrative responsibility is created, and it will be possible then for the superintendent to hand over, *de jure*, some portions of his responsibility to his assistants; at the same time the administrative authority of the superintendent must be maintained. Further, the building of smaller asylums would act favourably in two ways. It would provide more positions of independence and of sufficient salary for a larger number of men. Wachsmuth asserted that two asylums of 400 patients in place of one of 800 would provide the independent positions and would not be more expensive.

With regard to the internal routine of the asylum, Dr. Wachsmuth recognised that the matter of transference from one section to another must rest with the superintendent, but within the sections the assistant physician must be free to arrange the routine while the superintendent acts as consultant. Notice was taken of the fact that some men are not fitted to be trusted with independence to this degree, but Dr. Wachsmuth added that if after three years in psychiatry a man is not qualified to carry on a section he is not a fit person to be in

the service. The question of the appointment and dismissal of the *personnel* of the asylum was recognised as a difficult one. In some asylums the consulting physician (Oberarzt) of the section has the right to suggest and the superintendent to confirm the appointment; dismissal should rest with the superintendent or with the committee.

Another cause which leads men to avoid the service or to leave it after a certain amount of experience of it is "living in," an entirely unnecessary interference with the personal liberty of the assistant physicians. Of 104 asylums from which Dr. Wachsmuth gained information, a day-service, *i.e.*, one man on duty for the day (Tagesdienst), existed in 88, and in four others there was a day-service on Sundays. Closely connected with this is the question of providing married quarters for the men attached to the asylums. In most academic callings the family lives outside the circle of the work of the husband, or at any rate is not brought into such close contact with it as in the case of psychiatry. In the 104 asylums mentioned in this paper there were:

Medical staff	.	.	.	.	.	.	.	636
Married quarters	.	.	.	.	.	.	.	320
Married men	.	.	.	.	.	.	.	222
Unfilled positions	.	.	.	.	.	.	.	65

The correspondence in many asylums is dealt with by the assistant physician of the section, but is signed by the superintendent. Wachsmuth suggests that the correspondence should be attended to entirely by the assistant physician, *pro* director.

In No. 17 of the *Psychiatrisch-Neurologische Wochenschrift*, Dr. Hopf, Oberarzt in Potsdam, published an article in which he drew attention to the existing tendency by many directors to settle important matters with the head attendants and matrons (Oberpflegungs-personel) and to ignore the doctors. This is the most ticklish point attached to independence (Selbstthätigkeit), and is calculated to render a general collaboration impossible. The director must protect his rights as well as the assistant physicians claim their independence, and this can be done only by mutual concessions. In a service which includes so many responsibilities it would be a great drag on a director always to be anxious about consulting the assistants; on the other hand, a deliberate and constant ignoring of the assistant physicians must be felt as a procedure which the director of an asylum, in

the interests of the medical considerations, can and must avoid.

Bavaria suggested :

(1) Equal pay for all consulting physicians (Oberärzte), if not throughout Germany, at any rate throughout one and the same federal province.

(2) Five weeks' leave for the deputy director instead of four, and week ends for the hospital physicians (Abtheilungsärzte).

(3) Release of the consulting physician (Oberarzt) from section duty ; he should make control visits throughout the asylum.

Funds for scientific work are provided, but time for it is not arranged.

In most of the asylums, varying in size from 100 to 650 beds, there is a medical man for every 100 to 126 patients ; in some of the biggest the proportion is one medical man to every 150 to 200 patients. This includes voluntary doctors, whose duties, however, are practically the same as those of the assistant physicians (Assistenzärzte).

The medical work should not be a business, but a calling, and we psychiatrists must treat it as a calling in order to combat the prejudices of the lay public. Our duties and general activity are those of a public official, but we have not the rights of a public official.

Various improvements, therefore, are necessary in our asylum service, and some of these may be attained through our societies and unions, but the most important factor in achieving such an improvement in our position and in the general appreciation of the lunacy service will be undoubtedly the raising of the academic standard of those who join the service. This, again, will be encouraged and developed by an improvement in the conditions of asylum work.

From this paper of Dr. Wachsmuth we learn that four years ago our German colleagues had to tackle a condition of affairs very similar to that which confronts us to-day, and I am informed by Dr. Wachsmuth that already considerable progress has been made. The conditions of the psychiatric service in Germany at present may be gathered from a letter written by the director of the Galkhausen Asylum in the Rhine Provinces regarding the appointment of assistant physicians :

“ Since the year 1905 a satisfactory examination in psychiatry has had to be passed by candidates in the State medical examina-

tion. All the German universities with clinics have instituted professor's chairs. A further test in psychiatry, after entrance as assistant physicians, is not required. A satisfactory assistant physician of three years' standing becomes a hospital physician (Anstaltsarzt) with a salary commencing at £175, together with house, garden, light, fuel and drugs. Any assistant physician wishing to marry is permitted to do so. Residences are not provided specially in the grounds of the hospitals. If one of the houses on the estate is available it may be occupied, but if none is vacant the doctors are allowed to live outside the asylum estate altogether. The board and residence value of an assistant in the hospital, £50, is allowed them. After about eight years' service the position of consulting physician (Oberarzt) is reached, with a salary of £275-350, house, garden, etc. The director is paid £300-475 and has the usual emoluments."

From this letter we see that an assistant physician may marry even in his first year of service, and that if a house on the asylum estate is not available he may live outside and receive a sum equivalent to the value of the board and lodging of an assistant living in the hospital. We see also that the salary of consulting physician (Oberarzt) is five-sevenths that of the director.

Similar conditions are mentioned in a letter from the director of the Alt-Scherbitz Asylum. Further, from an article by Schroeder (Alt-Scherbitz) and from a publication by Dr. Hans Laehr we learn (1) that although a special training in psychiatry, subsequent to the State medical examination, is not obligatory—and here we must remember that all students in Germany must take a course of instruction in a clinic—still, an assistant physician receives a higher initial salary if he can show that he has had some post-graduate training at a clinic; (2) that the appointment to the position of hospital physician (Anstaltsarzt) is a life-long appointment; (3) that in most of the Federal provinces the assistant physician reaches the position of hospital physician (Anstaltsarzt) after three years' service and that of consulting physician (Oberarzt) after eight to nine years' service; (4) that in many of the Federal provinces a special fund is provided to enable physicians to attend congresses connected with psychiatric medicine, or to pay their fees and provide them with books and other necessities if they go to a university or clinic for a period of study.

Now to return to the final paragraph of Dr. Wachsmuth's paper: "Various improvements, therefore, are necessary in our asylum service, and some of these may be attained through our societies and unions, but the most important factor in achieving such an improvement in our position and in the general appreciation of the lunacy service will be undoubtedly the raising of the academic standard of those who join the service. This, again, will be encouraged and developed by an improvement in the conditions of service." In this paragraph the two sides of the question, *viz.*, an improvement in the position of assistant physicians and an improvement in their academic training so as to deserve and to be justified in demanding fresh privileges, are made evident, and the question must be considered from these two points of view simultaneously. It will be useless to pay attention to either side alone.

From another letter we learn that since 1905 it has been obligatory throughout Germany for every candidate for the medical degree to pass an examination in psychiatry. At least one semester's attendance on lectures and clinical demonstrations at a university clinic is required, and the large majority of students of medicine attend during two or more semesters. During this time they receive instruction regarding cases of mental disease, psychology, experimental psychology and forensic psychology. Having obtained his degree the man who wishes to further fit himself in this branch works as a voluntary assistant in the wards of a clinic or an asylum.

Under the supervision of a regular assistant he takes histories of and examines patients, helps in testing the sputum, blood and urine, learns to make lumbar punctures skilfully, and to collect the blood for the serological tests. Efforts are made not to overburden the new-comer and not to make his work too monotonous. He is made to feel that he will soon be looked to for original observations and hypotheses, and he usually responds to the tacit appeal to individual intellectual activity.

Usually in less than a year he is given charge of a ward or a small group of wards. The second year of his service he is eligible for an assistantship, and is either promoted where he is or goes to another institution as a regular assistant.

In the clinic each assistant, outside his strictly clinical duties, carries on some chosen line of study. After this has progressed to a certain extent there comes a period when the

completion of his work requires his undivided attention; to this end an arrangement is made so that every assistant in addition to his regular holiday away from the institution is given two months out of each year for special scientific requirements. He remains at the clinic, but is free from clinical duties.

Further, there is a monthly "Referatabend," at which the results of work are made known before publication, reports on current scientific literature are made, and important legal cases are discussed freely and expert testimony is reviewed.

There is also at the clinic at Munich a course in the evening once a week. The hour is arranged to suit the doctors in general practice; this course is well called a "Practicum." It is crowded by eager, earnest men who wish to keep up with the times, and who, of course, have no time to go to the ordinary university courses.

In addition to the ordinary assistants (clinical) there are here four persons holding unique positions. They are selected from amongst those who already have had considerable experience in psychiatry or allied branches of science, and who, by their past work, are considered desirable additions. They come here partly as teachers and partly as independent research workers. They relieve the heads of the departments of much of the less important work, and are able to influence and stimulate the other assistants to scientific effort.

The voluntary assistant receives free board and lodging only in most cases: sometimes a small honorarium is given to him.

In order that the Committee may have a more comprehensive idea of the facilities provided in a well-appointed clinic such as that at Munich I append a list of lectures given in the clinic during the session 1908-9; this list is taken from the *Jahresbericht über die Königliche Psychiatrische Klinik in München*.

By Professor Kraepelin:

- Clinical Psychiatry;
- Clinical Demonstrations for Advanced Students;
- Clinical Experimental Psychology.

By Professor Gudden:

- Topographical Anatomy of the Brain;
- Psychiatric Polyclinic;
- On the Treatment of Young Criminals in the Federal States;
- Criminal Psychology for Medical and Legal Men.

By Professor Alzheimer :

Normal and Pathological Anatomy of the Cortex of the Brain ;

Practical Forensic Psychiatry for Medical and Legal Men ;

Clinical Demonstrations for Advanced Students.

By Dr. Specht :

Introductory Course in Experimental Psychology ;
Studies in Criminal Psychology.

By Dr. Rüdin :

Legal Psychiatry for Medical and Legal Men ;
Problems, Facts and Prophylaxis of Degeneration.

By Dr. Plaut :

Methods of Examination of the Insane ;
Diagnosis—Spinal Puncture, Cyto-diagnosis, Wassermann reaction.

In connection with the short course for qualified men the instruction was given by the following teachers :

Alzheimer : Normal and Pathological Anatomy of the Brain-cortex.

Brodmann : Topographical Histology of the Brain-cortex.

Isserlin : Psycho-diagnosis and Psychotherapy.

Kattwinkel : Demonstrations in Neurology.

Kraepelin : Clinical Psychiatry. Clinical Experimental Psychology.

Liepmann : Aphasia, Apraxia and Agnosia.

Plaut : Cyto- and Sero-diagnosis.

Rüdin : Problems and Facts of Degeneration. Forensic Psychiatric Demonstrations.

Weiler : Physical-Clinical Methods of Examination.

In this same report there is a long list of works which have been carried out in the various laboratories in the clinic, anatomical, psychological, anthropological and others.

Expert reports on criminal cases are also made. For this purpose the criminal is admitted into the clinic under special observation.

The importance of psychology and of psychiatric medicine in social, forensic and legal matters was made evident in Professor Sommer's article on "The Position of Forensic Medicine." He pointed out that forensic psychiatry has embraced a much larger field during the last few years, and that it has

assumed an important position in our social life. Its application in cases of those accused of crime and of those under sentence, in cases of weak-mindedness in relation to capacity to manage business affairs, in cases of injury under the Employers' Liability Act and also of young people in reformatories will be appreciated by everyone. Professor Sommer communicated with many universities in Germany, Austria, France and Italy, and he found that in Germany and Austria lectures in forensic psychiatry were provided, and that these lectures were attended by legal as well as by medical men. At Giessen the teaching is entrusted to the Oberarzt of the clinic.

In the matter of education also psychology finds a wide application.

From the report so far the Committee will gather some idea of the scope of this branch of medicine, and will no doubt recognise the necessity for the development of facilities for teaching and research. These facilities are provided in Germany through the psychiatric clinics in connection with the universities. Every university has a psychiatric clinic attached to it which occupies a position in the university as important as the surgical, medical or other clinics. In most countries in Europe it is admitted that the psychiatric clinic must be the centre from which development in this branch of medicine will proceed. The functions of such a clinic are defined by Professor Kraepelin as being :

Attendance on the mentally ill.

The instruction of students.

To serve as a place to which criminals suspected of mental disturbance may be remanded for medical observation.

The dissemination of medical views on social questions and the correction of existing prejudices regarding insanity.

To serve as a connecting link between the larger remotely situated asylums and scientific research.

The scientific investigation of all problems connected with the study of mental diseases.

In the regulations for the reception of patients into the psychiatric clinic at Giessen we find—

S. 1.—The function of the psychiatric clinic at Giessen is the cure and care of those mentally afflicted, and clinical instruction in psychiatry.

S. 4.—The application for the admission of a patient into the

clinic is to be made in writing by the next of kin, by the committee, or failing these by various other authorities.

S. 5.—The following information must be provided regarding the patient :

(a) A history from the medical attendant or the district medical officer (Kreisarzt).

(b) From the municipal authorities regarding the civic conditions.

S. 6.—In emergency cases the reception of the patient is allowed temporarily on application to the director.

S. 23.—In case of recurrence within three months after discharge the patient can be brought back to the clinic on sending information to the director.

S. 27.—Patients who, because of the interests of teaching or because of want of room, can no longer be retained in the clinic, must be sent to one of the provincial asylums. In that case the relatives must be informed at once and their assent obtained.

S. 29.—In case the relatives object the matter is submitted to the Minister for the Interior and to the Minister of Justice. In the same way these authorities decide the matter if the relatives wish to remove the patient against the will and advice of the director.

These clinics are carried on on the lines of freely come, freely go, as far as is consistent with the safety of the patient and the public. In them no legal document is necessary for the admission or discharge of patients. But where the character and severity of the mental disturbance require the longer detention of the patient in the clinic or in an asylum, such detention can be exercised only under a legal procedure which carefully safeguards the rights of the patients.

In this way it is possible to avoid the stigma which is attached to certification and seclusion in an asylum. That this is appreciated by the general public is demonstrated by the number of people who make use of the opportunities offered them. To the clinic at Giessen with its seventy beds, between three and four hundred patients were admitted in 1907. From the report of the clinic at Munich for the years 1906–7, we learn that there were 1,600 admissions in 1905 (the first complete year after it was opened), 1,832 admissions in 1906, and 1,914 admissions in 1907. At the present time admissions go on at

the rate of ten or twelve per day. It should be mentioned that at Munich the clinic is open night and day for the reception of patients, so that they can be brought under the care of an expert at the earliest possible moment, and the painful impressions produced often by detention and restraint by unskilled persons and in unsuitable surroundings are reduced to a minimum. This immediate treatment at the hands of men experienced in insanity is a matter of the greatest importance from the point of view of a favourable termination of many of these cases.

Treatment of such large numbers will, of course, necessitate the employment of a large medical and nursing staff. At Giessen, with seventy beds and between three and four hundred admissions a year, there are five medical officers, including the director. At Munich, with one hundred and twenty beds and three or four thousand admissions, there are fifteen medical officers to carry on the work of examination and supervision of the patients. The nursing staff must be provided in the proportion of at least one to five. This is, of course, a high figure, but there are two conditions to be remembered: first, the very large number of admissions dealt with; and secondly, that these clinics are established, not for the housing of the insane, but for the care and cure of those suffering from incipient mental disturbances—a most important distinction and one not yet fully appreciated in this country.

The clinics are under the State, as are the universities of which they form a part. The first attempt at the treatment of the insane in a hospital was made in the Juliusspital in Wurzburg: since this hospital was founded in 1576 patients suffering from mental diseases were treated under the same conditions as those afflicted with other diseases. Since 1888 there has been a separate university institute. Clinical instruction was already given in 1833 by Marcus. In Munich a clinical-psychiatric course was started by Solbrig in 1861. From that time various efforts were made to establish facilities for the scientific teaching of the subject, chiefly by Gudden and Anton Bumm. At first it was thought that a clinic might be established in connection with the provincial asylum, but it was at once recognised that this arrangement would not work smoothly. Finally the municipal authorities of Munich made an offer to the university to provide a site for a psychiatric clinic, and

the State undertook to erect the necessary buildings, to furnish them, and it also guaranteed the management. This scheme was carried out at a cost of £78,500 ; £68,500 for the buildings, £7,500 for furnishing, and £2,500 to provide scientific apparatus.

As we have mentioned already, there is a psychiatric clinic in connection with every university in Germany. In these facilities are provided for the care of cases of acute insanity, and owing to the absence of legal formalities they are made use of by a large number of borderland cases which require psychiatric treatment, but cannot make up their minds to submit to the painful preliminary conditions usually connected with admission into an asylum. In these the subject of psychiatry also, which cannot be learnt from lectures and books, is taught by clinical demonstrations and clinical work, and, further, scientific investigations are carried on from which will spring prophylactic as well as curative treatment.

Professor Kraepelin, in his speech at the opening ceremony of the clinic, pointed to the advantage which would be derived by patients, by students, by science and by humanity. He gratefully acknowledged the interest taken in the establishment of the clinic by the State and especially by the Minister of Instruction, by the municipality of Munich, by the authorities of the university, and by the medical faculty. "Many heads and many hands have worked together" in order to provide this science with the requisite means of progress. He thereby rendered manifest the necessity for co-operation amongst all interested in scientific and social advance if we are to succeed in combatting the terrible scourge of insanity.

It is interesting to observe that at the commencement of his speech on this occasion he made a quotation from a decree issued by the Bavarian Minister of the Interior in 1863. The quotation was as follows :

"By the choice of a site for the Upper Bavarian Provincial Asylum in the neighbourhood of the capital city, Munich, it was recognised that it would be of the greatest value that such an institution should be open to students of the University and to those already in the practice of medicine. It would be evident also that the immediate correct treatment of the mentally afflicted would be of the greatest importance, and that the instruction of those just entering the medical profession would lead to very beneficial results."

Sixty years ago, *i.e.*, ten years before the decree just referred to was issued, the visiting committee of Hanwell Asylum was inspired by Conolly to include in its annual report similar enlightened views regarding the necessity of basing the treatment of mental diseases on a scientific knowledge of the subject. And about the same period there came a plea from the medical staff of the Forston Asylum in Dorsetshire that means should be adopted to ensure the early treatment of cases of mental breakdown.

Appendicitis in Private and Public Hospitals for the Insane. By JOHN FREDERICK BRISCOE, M.R.C.S., Westbrooke House, Alton, Hants.

THE excuse for a discussion on this physical affection in association with the insane mind is an attempt to prove by its rarity in county and county-borough asylums, asylums for idiots, mental hospitals and licensed houses of England and Wales, that it is preventable. In ten years from 1902 to 1911 there are recorded by the English Commissioners in Lunacy seventy-five deaths from appendicitis, typhlitis or perityphlitis, ascertained in the majority of cases by *post-mortem* examination, as having occurred among the insane population of the above institutions. And of the seventy-five deaths it would be instructive to know how many of these had the relics of this disease upon them or were suffering at the time of admission from acute or chronic symptoms. In making the statement that appendicitis is a rare malady in private and public hospitals for the insane, I do so with the support of several practitioners of psychiatry. Not only do these clinical observers give me their assistance, but further I have the help of the pathologist to the London County Asylum at Claybury who states, "I do not believe there has been a single case of appendicitis on the *post-mortem* table at Claybury since I have been pathologist. Consequently in more than 2000 *post-mortems* there has been no case." In comparing the Claybury Hospital for the insane with two general hospitals, St. Bartholomew's and Guy's, we can make a valuable contrast. For instance, at St. Bartholomew's Hospital 1645 autopsies were made between 1909 and 1911, and of these, 69 were recognised as appendicitis.

At Guy's Hospital in the year 1900, of the first 500 *post-mortems* 12 were recorded as cases of appendicular disease. As regards the proportion of cases of appendicitis to the number of admissions I find that at the same hospital in 1890 there were 8588 admissions. Of these admissions, 306 were subjects of appendicitis, 187 being under the care of surgeons, while 119 were under the care of physicians. The death-rate from appendicitis recorded in the Registrar-General's Report for 1909 shows a slight gradual increase from 1901 to 1909. Referring to other parts of the Kingdom in this investigation I find the statistical tables from the Lunacy Board of Scotland show that formerly deaths from appendicitis were usually returned as deaths from peritonitis, that appendicitis had no separate heading in the Board's tables of causes of death, and is not yet separately notified. If a case of appendicitis were returned it would be placed in the table of Diseases of Digestive System; but it has been ascertained that no death in a Scottish asylum has been returned during the past five years as due to appendicitis. Again the Blue Book of the Inspectors of Lunatics for Ireland in the issue for 1911 gives typhlitis grouped among the causes of death, but the table gives no return of the complaint for that year. And in the table there are only eleven cases of peritonitis. Likewise the Secretary of the Office of Lunatic Asylums, Dublin Castle, sends me the returns for typhlitis for the period 1902 to 1910 as follows: 1902, 0; 1903, 1 male; 1904, 0; 1905, 1 female; 1906, 0; 1907, 1 male; 1908, 2, male and female; 1909, 0; 1910, 0—*viz.* five in all. And the cause was ascertained, except in one case, by *post-mortem* examination. With these figures for your guidance I would remark that in experimental research and statistical calculations, extreme care and accuracy should survive comment. But with the greatest attention and thoroughness that any of us can spend on the subject matter of a professional inquiry in medicine, exception will be sure to prove the rule.

Diagnostic skill must be an accomplishment of the future general practitioner if he is to weather the storm of criticism. I admit the responsibility is a great one, but with the modern instruments of research the practitioner has the advantage of his forefathers if he uses these instruments with care, skill and ingenuity. Yet he must not lay aside altogether the older methods as if they were of no value to-day.

I am desirous of your assistance in this preliminary inquiry on "appendicitis in asylums." The cæcum with the bud of the appendix we are told blossom forth from a straight uniform piece of intestine, at the sixth week of intra-uterine life. This is a persistent abdominal occurrence in the plan of the permanent anchorage of the intestines. At first a movable piece of intestine of like structure, the appendix eventually comes to an anchorage, but there is much doubt as to its further use, for we have no definite facts to rely upon. Moreover, its cavity exhibits a tendency to become obliterated, according to Quain in 25 *per cent*.

The appendix, like a tendril, would seem to pilot the cæcum to its anchorage in early life. In fact, is it not part of an arrangement in which the intestines become suitably settled and restrained in the bed of the abdomen? If there were not supports or stays in the abdominal cavity the outer and inner circle of the intestinal tubing would become hopelessly disarranged. There seems to be, too, another duty of the mesenteric stays, especially of the large bowel, namely, that of dividing and interrupting the peristaltic wave at certain points. The fæces are carried onward from the cæcum by not only a circular squeeze, but also by a detrusor thrust of contraction. And in the normal abdominal cavity we thus observe bends here and turns there. If a physical kink can excite the nervous system to madness, I am sure there is also an associated neuropathic kink of far more importance in the estimation of the causes of insanity. It is my purpose, in opening the debate on this subject of appendicitis to travel over the diseases peculiar to the tubing of the gastro-intestinal track and it is worth while comparing them with the local condition, appendicitis. The same poisonous consequences of micro-organisms and decomposing food, detained and brought to an anchorage may afflict any part of the tube, and especially the fermenting vat of the intestinal cesspool which we are now considering. If it is a difficult matter to keep the mouth of the intestinal track free of dirt it is not a difficult problem to rid the intestines of it. We all know that a common aperient like Epsom salts will answer our object.

As we proceed along the lines of the science of civilisation many hints fall to the medical profession besides the essential points of cleanliness. Surely appendicitis is nothing more or

less than a local virulent growth of the *Bacillus coli communis* or of its relatives, sealed up, as it were, in a pouch—the fight of the lymphoid tissue against an invasion. I have observed this in the cæcal appendages of poultry. In one case in particular I noticed an enormously distended appendage. I was unable to press out the contents from the mouth of the tube, for it was obstructed. The closed pouch contained turbid fluid, micro-organisms and parasitic thread-like worms with fæcal products. Inflammatory changes of redness and swelling were noticeable.

Other domesticated creatures like the horse, the cow or the hen equally come under the eye of the pathologist and bacteriologist as instances of comparative disease. The horse suffers from staggers and other ill-health owing to the teeth not meeting properly during mastication. The result is a foul motion and auto-intoxication and is easily remedied by the use of the file. Likewise the hen emaciates, loses its feathers, and the cæcal appendages become inflamed when the gizzard is without grit, as so often happens in a badly managed poultry run. And in man we know that convulsive seizures such as epilepsy are better prevented by attention to the chylo-poietic viscera than by the administration of bromides; for although chemical restraints are convenient they are dangerous if their use is prolonged, inasmuch as they encourage degeneration of the tissues. In rest and pain we have similar cause and effect when there is plugging of the cavities of the body. A most familiar instance is tinnitus aurium. It has to be proved whether the newer surgical operations of short circuiting of the intestines or fixation of movable kidneys are so effective in the treatment of constipation as the physician's older remedies of blue pill and black draught. Undoubtedly aperient medicines drive not only visible dirt but also muddled ideas and delusions into the closet. No one who has lived in a hospital for the insane can contradict me. That is why I conceive appendicitis is so uncommon among the institutional insane. Thus, if dirt and spiritual vapours can be readily expelled by the skill of the asylum physician, how is it that the physician in charge of the sane population has not yet succeeded in teaching the public that the first principles of healthy life are based rather on education than on operation? I do not believe that it can be often necessary to open a patient's abdominal cavity for

relief of chronic constipation unless the classical signs of obstruction are present.

The perfect system of dieting, as practised in asylums for the insane, now comes under our review. Food that is put into the stomachs of the institutional insane is, as we know, of the dietetic order and amount consistent with health. It is also of the best quality—simple and wholesome; not least, it is well prepared by cooking. It is carefully macerated and divided beforehand, and is given to the patients in this prepared state; while, on the other hand, it is spoon-fed to those who are without teeth, or who are accustomed to scramble and bolt their food. The indifferent feeders then are always under notification and are individually superintended at the meal hours. Constipation is never permissible in asylums, and this is the only sensible explanation in my opinion why their cæcal appendages are less often affected by inflammatory attacks. It is a very large matter in the treatment of all diseases to first acquaint one's self of the condition of the bowels. The axiom "Are your bowels open?" has been handed down to us from time immemorial. And whatever views we may hold as to the predisposing causes of appendicitis, one cannot remove from the mind the exciting effects of a succus entericus chemically disarranged with foul accumulated fæces irritating the mucous membrane, filling-up and ballooning the cæcum and the large intestine beyond, for a lengthened period. If medical men, outside asylums, could guarantee the condition of a person's bowels beyond hearsay evidence, they would be hideously surprised to find how imperfectly is this essential factor of health attended to as compared with the procedure in asylums for the insane.

The voice of the dentist is carrying weight with medical officers of health to the extent that "tooth-brush drill" is a coming fashion. Since the entrance of the intestinal tract is so constantly foul imagine what the track must be lower down. And what a short distance there is between the lumen of the gut and its peritoneal covering! Is this not a far-reaching factor in auto-intoxication, having regard to the enormous powers of absorption of the inner and outer side of the intestinal tubing? Therefore I should like to point out that "intestinal drill" in the school is just as important as "scalp drill" or "tooth-brush exercise."

The technique of "intestinal drill" in asylums is complete,

the plug of the W.C. is under lock and key, and the mental nurse can notify a stool, its odour, colour, consistence and appearance. This discipline enables the nurse to give a report to the medical superintendent, and the chemical and bacteriological examination of the fæces can be made in a routine manner like urine analysis. At Earlswood Asylum for Idiots "intestinal drill" with these young people is a feature in the management of this institution, and they rarely have appendicitis.

The operations for chronic constipation and appendicitis may be very fascinating to the surgeon, yet to prevent them by "intestinal drill" is a greater clinical achievement, although the burden of its practice lies on the shoulders of the physician. And this education is the reason why asylum physicians are more skilled in the prevention of appendicitis than are other members of the profession.

DISCUSSION,

At the Annual Meeting held on July 11th, 1912, at Gloucester.

The PRESIDENT said the subject which had been brought forward for discussion in this paper was of interest, and the author was turning the tables on the profession outside, and saying in effect: "If you want to know how to prevent appendicitis, see how we do it in asylums." He was glad to see present one or two of the local surgeons, and he hoped they would join in the discussion, and let the meeting know whether from the asylum side the profession could throw some light on the matter, or whether the surgeons outside asylums could throw light on asylum medical officers' understanding of it. His own view was that appendicitis was extremely rare in asylums. During the twenty-nine years he had been at Barnwood House, he had known of only two cases. One was that of an old lady who had peritonitis, and was found to have a necrosed appendix when a *post-mortem* examination was made. In the other case there was found to be rigidity in the right flank on admission, and next morning there could be no doubt that she was suffering from appendicitis. She was operated upon, and did well. But cases amongst the staff of asylums more nearly approached the normal incidence of the disease outside. The subject was of importance, and it had a considerable bearing on the probable causation of this common disease.

Sir GEORGE SAVAGE said that one or two things struck him as interesting in relation to this paper. One was that when influenza, as an epidemic, appeared, for a year or so afterwards papers appeared in the medical journals pointing out how free the insane were from influenza, and discussing it as something special. It was found later that the insane, when placed under similar conditions, suffered from influenza as did other people. That made one think that people in asylums lived in a way which was healthier than that of the majority of the population. His experience had been that appendicitis was very exceptional in asylums. During his seventeen years' residence in Bethlem Hospital there was only one case of this disease, and that occurred in a house-physician. Another point which might interest the meeting was that three or four years ago he was asked to take part in a discussion which was held by the Association of Medical Officers connected with insurance offices; and the two questions for debate on that evening were the insurability of people who had suffered from insanity, and the insurability of the lives of those who had suffered from appendicitis. The surgeons maintained stoutly that a man who had had appendicitis should not be

insured, unless he had had his appendix removed. He regretted to say that the feeling in the Life Assurance Medical Officers' Association was that no person who had ever been insane should be insured.

Mr. BUCKELL said he thought any statistics of this kind were of very great importance in elucidating the ætiology of disease. It was only in matters of this kind, where one had the opportunity of comparing the disease incidence amongst a large number of people similarly circumstanced, that one could really get much in the way of valuable information. It did look as if Dr. Briscoe had proved his thesis, namely, that careful attention to the action of the bowels and to the food had much to do with the question of the incidence of appendicitis. Of course, statistics were rather dangerous things to base theories upon, and one would like to know a little more, to have more detailed figures, before coming to a definite conclusion. Dr. Briscoe quoted deaths from appendicitis, and compared them with deaths from the same condition in the large general London hospitals. But in London hospitals people were admitted for the treatment of appendicitis, whereas in asylums the patients were admitted for the treatment of their insanity. Another point was, that one might consider the age-incidence of appendicitis in connection with this matter. He was not well acquainted with the figures dealing with the age-incidence of insanity, but he imagined that the greater part of mental trouble occurred in the later decades of life, whereas it was well known that the incidence of appendicitis was chiefly in the earlier period, and that, of course, would have some influence on the statistics. Naturally the occurrence of an attack of appendicitis depended upon something which happened at the time, but it had been prepared for by what had gone on previously. It surprised him to hear that there were so few cases of appendicitis in asylums, because at those institutions fresh cases were constantly being admitted, many of whom must previously have suffered from chronic constipation, and one would think there would be sufficient opportunities for outbreaks, even though the bowels were kept regularly acting. Considerations such as those made him feel that they were not yet quite at the end of the matter. Still, he thought it very likely that regular attention to the action of the bowels might be an important factor in preventing the incidence of an acute attack of appendicitis. Dr. Briscoe suggested to outside practitioners that they should prevent appendicitis among the general population by ensuring that the latter kept free from constipation. He feared, however, that that was a counsel of perfection, because the practitioners did not get the lives of their patients to regulate until they fell ill. Of course, school drill might do something; but he feared that young people, as soon as they left school, were too careless to be bothered by such things.

Dr. PERCY SMITH said his own experience was very similar to the President's. He had been connected with lunacy about the same number of years. While he was physician at Bethlem Hospital 3,000 to 4,000 cases were admitted (and most of the cases admitted there were acute cases); he remembered only one case of appendicitis. That patient died, and *post-mortem* an abscess was discovered in connection with the appendix. It was the sort of case which he described as veterinary medicine, because one could not get any help from the patient, and if one did not happen to detect the physical signs independently one was at sea. This patient had melancholia, with very bad constipation, which the use of enemas relieved. He appeared to be improving, but he again got constipation, with complete stoppage, and he died. The other case of appendicitis which he remembered happened since he had been in practice as a consultant; this patient also had melancholia. This man had been sent abroad by a London physician, but got worse rather than better from travelling about on the continent. He came home very ill and depressed, and with suicidal tendencies. He was at first placed under observation in a nursing home, where he swallowed his teeth, and it was necessary to perform an operation to remove them. He was then certified and sent to a private asylum, and he, Dr. Percy Smith, was asked to see him again there. Later he had a definite attack of appendicitis. He advised that the patient should be operated upon for it, but it was not done and he died. Those were the only two cases of the condition which he had seen since 1884 among cases of insanity, and apparently it was not heard of much in asylums. Dr. Briscoe's statistics showed that at any rate in the London county asylums, where they had a central pathological department, they did not find a large number of cases of the disease, yet it seemed to occur in increasing numbers

among people outside those institutions. It seemed as if most of one's friends had had the condition, and a definite proportion had had operation for it. Recently he heard of seven cases of appendicitis having occurred in one family, and two daughters at one time had operations for it. Why such a large number of cases should arise now it was difficult to say. Recently he was discussing the matter with Dr. Hobhouse, of Brighton, and his opinion was that it was due to influenza. He said that since the influenza epidemics, which began about 1890, cases of appendicitis had increased. With reference to what Sir George Savage said, he remembered that at the first epidemic in 1890, when he was at Bethlem Hospital, most of the staff got influenza and many of the nurses, but there were practically no cases among the patients of the institution. But in connection with Bridewell Hospital or King Edward Schools, the medical officers of which were also medical officers of Bethlem, of 240 girls in the school, 177 were in bed at one time with influenza. So that influenza definitely attacked people in institutions other than mental hospitals, whereas in mental hospitals the patients did not seem so liable. There had been epidemics of influenza at asylums, but they were, he considered, less frequent there than outside. Whether the absence of influenza lessened the liability to appendicitis he would not like to say.

Dr. BLAIR considered that it was interesting to raise the question as to what diseases were less common amongst the insane in asylums. He had been struck by the small number of cases of acute rheumatism one saw, and he had been all the more impressed by it because he had found it among the nurses with an unusually high frequency. With regard to appendicitis, he could remember seeing only one case of it, and it was not diagnosed until pus was pointing over Poupart's ligament. The patient was a very demented woman. *Post-mortem*, the appendix was found to be quite adherent. In asylums there was no doubt that one would not operate for appendicitis so readily as one would when it occurred in people outside, and, as Dr. Percy Smith had indicated, one would scarcely operate for subjective symptoms; one must wait, in these patients, for the occurrence of physical signs, and no surgeon would wait for those in ordinary cases.

Mr. WALLACE said he did not think appendicitis was more common to-day than it was some years ago. He thought the apparent increase was due to the better capacity possessed by the profession for diagnosis of the complaint. We knew that abdominal surgery had made very great strides during the last twenty-five years, and in that time diagnosis was much improved. With regard to what the reader of the paper said, he, the speaker, took exception to what he regarded as the extraordinary use of purgatives. By taking them one was educating the bowels not to act. There were plenty of means of inducing an action of the bowels without taking sulphate of magnesia and similar drugs.

Mr. HOWELL said that those who practised medicine and surgery outside asylums owed a debt to Dr. Briscoe for having brought to their notice an indisputable fact, one from which they could not get away. He was glad that the author did not bring it forward in a spirit of exultation and superiority, but rather as one of the inquiring habit, in the hope that the debate which would ensue would lead to some elucidation of the ætiology of the condition. It could not be a coincidence; what, then, was the explanation? Dr. Briscoe said the cause of appendicitis was intestinal stasis. Those were the terms to which the physician reduced all his talk on every medical subject, hoping, he supposed, to thereby confound the surgeon. Intestinal stasis produced symptoms of its own. If intestinal stasis were the precedent condition to appendicitis, then the latter would be a condition of old age, whereas it occurred amongst young people as a rule. Appendicitis produced intestinal stasis, but not *vice-versa*. What was the function of the appendix? Inflammation was a reaction to injury. If they could be sure of the function of an organ, they could deduce some of the methods by which it was liable to injury. Anatomically, it was a test-tube, the walls of which were lined or packed with lymphoid tissue and glands. The glands could be left out of consideration because they were present in the whole of the intestine. Therefore the cause must be something in the lymphoid tissue. The appendix was a Peyer's patch infolded, the lumen of which opened at the junction of the small and the large intestine. It was the last Peyer's patch along the course of the intestinal canal. What was the function of the Peyer's patch? If that could be found out, the function of the appendix itself could be discovered. Peyer's

patches consisted of lymphoid tissue, and they increased in size as one went along the course of the intestine towards the ileum. They consisted of a delicate meshwork, holding very many phagocytes. He believed those Peyer's patches had a particular function to perform. The food taken teemed with foreign microbes, bacilli for which the body had no use, and he believed that the bodies of the higher mammals had learned to depend, in large measure, on the normal presence in the intestinal canal of certain bacilli for much of the rough work of digestion. The work of dissolving off fibrin was carried on with the assistance of the hydrochloric acid. But in the cæcum the work of dissolving off the coating of cellulose was done with the assistance of certain special bacilli; and he asked his hearers to remember that those microbes were the only agents in the human body which could do that work. And it was to the advantage of the host, *i.e.*, that person's body, to protect those special microbes from attack by foreign or deleterious microbes. With all our indiscreet meals taken outside asylums—not one such meal, but a series—we were constantly taking food unwisely and eating in a hurry—we were, perhaps, supplying a pabulum which helped the growth of the injurious microbes, and at the same time rendered the existence of the native microbe precarious. Therefore these lines of Peyer's patches and these scavengers came to the rescue in the lower reaches of the intestine; the phagocytes were sent into the lumen of the bowel to devour the inimical microbes. The finishing touch to that work was given in the cæcum, where the appendix should pour out a flood of fluid charged with phagocytes; then the native microbe had fair play to dissolve off the coating of cellulose. But the foreign microbe did not take all this lying down, especially if he were virulent. He penetrated and permeated up the lumen of the appendix, and carried war into the appendicular camp. Therefore the amount of reaction required in this appendix lymphoid tissue to set the tide of battle in favour of the host was the determining factor as to whether there should or should not be appendicitis. The reaction of the lymphoid tissue might be so slight as to escape notice; or it might be so severe as to call forth all the reserve force of the individual to rescue him from death. Very often a breach was made in the walls of the tort, or the enemy compelled to entrench in a faecal concretion. In that case, battle was suspended and the enemy awaited further reinforcements. In any case the leucocytes would find that the very repair of these walls would be a handicap when an attempt was made to drive them out. The case in regard to tonsils and adenoids was not very dissimilar; there was not, however, time to go into the points of similarity of function in the two and the baleful effects of injury in both, and the benefit from the removal of the tissue in each case when that occurred. Follicular tonsillitis was not a trouble in asylums, because the air was so wholesome, and the patient always had definite and ample periods of rest, which was the great difference between the surgeon and the inmate. In the case of the latter, too, the food was wholesome and suitable, and was given at regular intervals, and the time devoted to meals was ample. In the vigorous adult food was made subsidiary to more intensive pursuits. He therefore did not wonder that appendicitis was more common outside than inside asylums.

Dr. MENZIES said he had looked up the results he had had in the last five years in the matter of appendicitis. It certainly was uncommon in asylums, but not, in his opinion, so uncommon as some of the speakers had said. During the last five years he had had five patients operated upon for the condition, four of them successfully. In one the condition was not discovered until after general peritonitis had supervened. In a sixth the condition was not diagnosed during life, but was found on the *post-mortem* table. There had been six operations for the condition in members of the staff. The fundamental difference between those was that the staff consisted of young and selected lives. In connection with the rarity of appendicitis one must consider the enormous frequency of intestinal kinks in the insane. Those who had taken the trouble to investigate would find the old men's and old women's wards crammed with such cases. Practically every old case which came to *post-mortem* examination had these intestinal kinks in the hepatic flexure, the splenic flexure, and in the cæcal and sigmoid areas. Clinically, one found the signs in nearly all the cases; nodular mastitis and pigmentation of skin, and one could feel, when the patient's colon was constipated, the transverse colon below the brim of the pelvis, over the sacrum. Those things were very evident if looked for. The trouble was that they were not usually looked for, so it was won-

derful for appendicitis to be so uncommon in asylums and yet for intestinal kinks to be so common, obstruction being one of the causes of appendicitis. He did not know whether one should not consider that appendicitis had killed off those patients who were going to die of it before they became insane. Perhaps the old people who did not get appendicitis were protected from it by the chronicity of the kinks; and when they came to asylums and had laxative medicines administered to them, they were not liable to develop appendicitis. His statistics referred to an institution with a population of about 1050 patients and 150 staff. He remembered the surgeon operating upon two cases on the same morning. Both of them had pus-formation. In the North Stafford Infirmary he understood that the statistics of appendicitis were falling gradually, so one might conclude that it was now on the decline.

Dr. J. F. BRISCOE, in reply, said he was extremely obliged to the various gentlemen who had discussed his short paper, and he was indebted to the Commissioners in Lunacy for their help in the matter, for he had addressed the secretary, who kindly sent him the figures. Those figures set him thinking, and he began to read the subject up. He believed he had read every book on the subject, and from them he collected a large number of statistics. His original address would have been such a long affair that it would have been very tedious to listen to, and accordingly it was necessary to crystallise it. He might have added to it many points, some of those which had been raised in the discussion. He was obliged for the President's remarks. It was satisfactory to find that Dr. Soutar's experience coincided with his own as to the rarity of appendicitis among the insane. The remarks of his old teacher, Sir George Savage, interested him very much. With regard to the age-period, it was known that youths were more liable to appendicitis than were persons of greater age, and he reminded Mr. Buckell, who raised the point, that at Earlswood Asylum all the inmates were young. Dr. Percy Smith's remarks as to influenza, and Dr. Blair's concerning rheumatism, were very interesting. Dr. Fletcher Beach, who was formerly at Darenth Asylum, agreed that appendicitis was very rare there. Dr. Douglas Turner informed him that he found the disease rare also among his feeble-minded young people in the institution for idiots of which he was superintendent. A certain London surgeon had declared that it was possible to get rid of tuberculosis and rheumatism from the system by short-circuiting the intestine. He agreed that there should be no abuse of aperients. He agreed as to the function of Peyer's patches. There were those who likened the function of the appendix to that of an oil-can or lubricant. Some surgeons believed that in 25 *per cent.* of people the appendix was obliterated. The exciting cause of the condition in many cases was the entry into the appendix of foreign matter, which caused strangulation. The point raised by Dr. Menzies that intestinal kinks were common in the aged insane was of much interest.

Clinical Notes and Cases.

A Case of Acromegaly with Mental Symptoms. By
GUY ROWLAND EAST, M.D., D.P.H., Assistant Medical
Officer, Northumberland County Asylum.

A. B—, æt. 43, was admitted to Northumberland County Asylum suffering from delusional insanity. His bodily condition was one of well-marked acromegaly. Occupation—coal miner.

Family history.—None of his near relatives have been affected by acromegaly, or any similar or allied disorder such as myxœdema, exophthalmic goitre, brain tumour or diabetes. His relatives have all been tall and well developed. His family has not been subject to any hereditary disease.

His grandmother, a tall, strong woman, died, aged eighty-six, from a

stroke. Cause of grandfather's death unknown. His father was 5 ft. 10½ in., weighed 14½ st., died, aged fifty-eight, from a stroke. His mother was very stout, height 5 ft. 10 in., weight 20 st., was rheumatic and died from fatty heart. She had six children—the patient being the second. There were three males and three females. Two males died at four months and one and a half years. One female at four and a half years. The other two females are still living and in good health.

Personal history and aetiology.—Patient had enjoyed excellent health until present disease began. Has only twice been confined to bed. When thirty had an attack of pleurisy and at forty was treated for lumbago. Both these diseases being common amongst miners working in wet pits. He had never contracted syphilis. When nineteen he was 5 ft. 7½ in. and weighed 10 st. When twenty-one he was 6 ft. ¼ in. and weighed 12 st. 6 lb. From this age he noticed that his head, hands and feet gradually became enlarged. He noticed the enlargement first in the head, next in the hands and finally the feet. He says his sight has always been good and he never wore glasses for reading. For the last year or two he has perspired excessively on exertion and has been subject to occasional shooting pains in the limbs and back of head. At times he had severe headaches.

Present condition and symptomatology.—Patient's height is 6 ft. ¼ in. and weighs 17½ st. His body, as a whole, looks broad and thick. The head and face appear big in proportion to the rest of his body. The hands are greatly enlarged, the feet less so. When he stands erect the head is slightly inclined forwards, while the back and shoulders are rounded, the chest and abdomen somewhat prominent. The double hump (of Marie), which is characteristic of the disease, is beginning to be developed. Patient is dark complexioned and well nourished. A muscular man, but says he soon tires on exertion. Gait heavy, the feet are brought down with a thump in a clumsy manner, but there is no inco-ordination. Temperature usually subnormal.

Symptoms.—The chief complaint is a feeling of lassitude and disinclination for exertion. Is easily fatigued. Is subject to severe headache together with pains in limbs. Has never noticed any giddiness or inclination to vomit. Slight tinnitus occasionally of left ear. His sight is good; he can see equally well with both eyes and can read small print easily. There is no hemianopsia present.

His appetite has always been excessive and he has for many years suffered from great thirst, requiring as much as two pints of fluid at meals. His hands and fingers often become cold and dead and get yellowish in colour. He does not bear either heat or cold well.

Detailed description.—The appearance of the patient is highly characteristic, the face, hands and feet being all enlarged. The expression is somewhat heavy and apathetic. The colour of face pale and slightly grey, the skin of forehead and right temple showing brownish pigmentation. The conjunctival and buccal mucous membranes are anæmic. The condition of the blood was: red blood-corpuscles number 4,400,000 per cmm. and hæmoglobin 76 *per cent.* White corpuscles are diminished in numbers. On microscopical examination the red corpuscles were of normal shape, but paler than natural; they formed rouleaux; a few were tailed and irregular in shape.

The shape of face is distinctly more oval and elongated than normal—the lower half being large in proportion to the upper. The forehead is broad and high. The superciliary eminences are large and the temporal ridges strongly marked. Eyebrows thick and bushy. The orbital fissures look narrow in proportion to size of face, but are normal in width. The eyes are slightly prominent and set widely apart and when patient looks into distance the right eyeball is inclined outwards. The nose is much larger than before the disease began. Nostrils broad and thick, nasal septum thickened, the cartilages, bones and soft parts being obviously increased in size. The malar bones and zygomatic processes are markedly prominent. The aperture of mouth is broad in proportion to size of face. The upper lip is thick, but space between nose and red surface of lip is not longer than normal. The lower lip is thick, full and everted. The upper jaw is enlarged; the alveolar processes thickened; palate high and broad, space at roof of mouth too capacious. The lower jaw is much enlarged; it projects forwards at the chin and is widened laterally. It is increased in length and thickness. It is curved forwards and downwards from the alveolar processes, leaving a greater concavity upwards than normal. The angle of the lower jaw is less acute than normal. The teeth of the upper jaw are mostly carious; the lower incisors are small and widely separated—a condition which has developed since the disease began.

The tongue is broad and flat, deeply ridged on upper surface; it is somewhat hypertrophied. The tonsils, uvula, soft palate and pharynx appear normal.

The scalp is covered with thick, black hair turning grey, which is wiry and strong. Skull not enlarged except that the occipital bone beneath the protuberance is more marked than usual. The sutures between the temporal and parietal bones are unduly prominent. A distinct ridge can be felt corresponding to the line of the suture. The scalp is not scaly; neck is short and thick. Head usually projects somewhat forwards and downwards, the chin being nearer the sternum than usual. The voice is low-toned and harsh. He cannot sing high notes since the disease began. The larynx is slightly enlarged, the *Pomum Adami* somewhat prominent. The thyroid gland is enlarged, the left side more so than the right. There is a resonant note all over the upper part of the sternum on percussion. No evidence of the presence of the thymus gland (which in some cases of acromegaly is enlarged and persistent).

Upper extremities.—The hands are enlarged in all dimensions, especially in breadth; they are distinctly spade-shaped; the fingers are uniformly enlarged and flattened antero-posteriorly; the ends are not clubbed; the nails look small in proportion to the size of the hands, and are short, broad and flat; the bones of the hand, fingers and wrist are all enlarged. The palm is deeply ridged and furrowed. Large pads of fat are present over metacarpo-phalangeal joints, and thenar and hypothenar eminences. The wrists are thick and enlarged, the peripheral ends of radius and ulna being markedly thickened. The forearms look large, and so do the upper arms; the elbow and shoulder joints are normal; the clavicles are large. The spines of both scapulæ are unduly prominent; the first part of the sternum is much increased

in length and breadth. The vertebral spines are slightly enlarged; the cartilages of the ribs, especially second and third ribs, are prominent and enlarged, some of the ribs are thickened. The thorax is broad and deep; the circumference of the chest at nipple level is $41\frac{1}{2}$ in.

The abdomen is somewhat increased in size, and at level of umbilicus measures $37\frac{3}{4}$ in.

The pelvis is large and broad; the iliac bones appear much thickened; the circumference at the iliac spines is $39\frac{1}{2}$ in.

Lower extremities.—The feet, like the hands, are much enlarged, especially in breadth. They are flat; the toes are much increased in size, due to enlargement of soft parts; the big toes are large, flat and square at the ends; the ends of the metatarsal bones of the big toes are much increased in size. There are well marked corns on both second toes; the nails of the big toes are flattened and almost square. The soles are deeply furrowed and large pads of fat are present beneath metatarso-phalangeal joints; the peripheral ends of both tibiae and fibulae are enlarged. The legs have increased in size since the disease began, but the increase is small in proportion to that of the feet. The calf-muscles are prominent; plantar reflex vigorous; no ankle-clonus. The knee-jerks are normal; the knees have increased in size since the disease began. The thigh muscles are well developed.

The skin is unnaturally moist; he perspires very freely; the sensibility is normal. Taste, hearing, smell and sight are normal.

Mental state.—For a month previous to his admission to this asylum, he had been excited and refused to work. He had been wild in manner, incoherent in conversation, and quite incapable of taking care of himself. He had talked constantly on religious matters and had threatened his doctor with violence. He went out into the street and preached a sermon to the air. On admission he was wildly excited, quoting the scriptures volubly. He stated that the Holy Spirit was in him; that he had been chosen by God as His mouthpiece; that he had messages from Heaven to preach the gospel to all men; that the Holy Spirit had commanded him to convert the heathen. He was wildly maniacal for about three weeks and had on occasions to be confined to a padded room. He slept little and shouted himself hoarse, maintaining that by God's command he must preach the scriptures. He held long conversations with imaginary persons on religious matters. At the end of three weeks he became much quieter and steadily improved. He was allowed out of bed and became a useful ward worker. At this time his letters home bristled with biblical quotations, but he did not speak of these matters in conversation. In another fortnight the religious delusions disappeared altogether and he recognised the falsity of his former beliefs.

Three months after admission he was discharged recovered.

The condition of the urine.—He passed an increased amount of urine and had noted this for some years. The amount averaged 66 oz. daily. The urine was pale and generally contained mucus. Reaction strongly acid; specific gravity, 1018. There was no albumen or sugar, and peptones were absent. The amount of urea varied from 1.2 to 2 per cent. At times the urine contained a deposit of pink coloured urates.

The condition of the heart and pulse.—The heart appeared of normal

size. There was no valvular disease; the heart's action was rather feeble and accelerated. The pulse on admission was rapid and jerky, the rate being 96, but as he recovered mentally it gradually fell to 76.

The respiratory system was normal; in the early stages of his maniacal attack his respirations were slightly quickened, due to his excitement.

The alimentary system was normal. He had an exceptionally large appetite, but digested his food well. The bowels acted regularly.

Detailed measurements of the different parts of the body:

Height, 6 ft. $\frac{1}{2}$ in.; weight, 17 st. 6 lb.

Head and face.—Circumference of head, $24\frac{3}{8}$ in.; length of head from glabella to occipital protuberance, $8\frac{3}{8}$ in.; length from occipital protuberance to top of chin, $9\frac{1}{2}$ in.; breadth of head across mastoid processes, $6\frac{3}{8}$ in.; length from top of forehead to top of chin, $8\frac{3}{8}$ in.; length from top of forehead to upper part of nasal bones, 3 in.; greatest width of alæ nasi, $1\frac{3}{8}$ in.; length of nose from upper lip to tip, $1\frac{1}{4}$ in.; length from septum of nose to top of chin, $3\frac{1}{2}$ in.; greatest distance between outer surfaces of malar bones, $5\frac{1}{2}$ in.; width of mouth, 3 in.; vertical measurement of lower lip, $\frac{1}{2}$ in.; breadth of tongue at its middle, $1\frac{1}{2}$ in.; length of tongue on protrusion from lower incisors to tip, $1\frac{1}{2}$ in.; lower jaw—vertical measurement from gums to lower part of symphysis, 2 in.; length from temporo-maxillary articulation to tip of symphysis of lower jaw, $6\frac{3}{8}$ in.; distance between the two angles of lower jaw, $5\frac{1}{4}$ in.; ears, greatest length, $2\frac{1}{2}$ in.; ears, greatest breadth, $1\frac{1}{8}$ in.

Upper extremity.—Length of arm from acromion to olecranon, 16 in.; circumference of arm at its middle, $12\frac{3}{4}$ in.; length of forearm from olecranon to styloid process of ulna, $13\frac{1}{4}$ in.; circumference of forearm at its middle, 12 in.; circumference of wrist, $8\frac{1}{2}$ in.; length of hand from wrist to top of middle finger, $9\frac{1}{2}$ in.; length of middle finger from palmar fold, 4 in.; length of middle finger on dorsum from metacarpo-phalangeal joint to tip, $5\frac{1}{2}$ in.; length of little finger on palmar aspect, $2\frac{1}{2}$ in.; length of thumb on dorsum from metacarpo-phalangeal joint to tip, $3\frac{1}{2}$ in.; circumference of middle finger, $3\frac{1}{2}$ in.; circumference of little finger, $2\frac{3}{8}$ in.; circumference of thumb, $3\frac{1}{2}$ in.; antero-posterior diameter of middle finger, $1\frac{1}{2}$ in.; length of nail of middle finger, $\frac{3}{4}$ in.; breadth of nail of middle finger, $\frac{3}{4}$ in.; length of nail of thumb, $\frac{1}{2}$ in.; breadth of nail of thumb, $\frac{1}{2}$ in.; circumference of hand (without thumb), $10\frac{3}{4}$ in.; circumference of hand (with thumb), $12\frac{1}{4}$ in.

Lower extremity.—Length of thigh from iliac crest to head of fibula, $21\frac{1}{4}$ in.; circumference of thigh at middle, $20\frac{1}{2}$ in.; circumference of knee over patella, $15\frac{1}{2}$ in.; vertical diameter of patella, 3 in.; transverse diameter of patella, $3\frac{1}{2}$ in.; length of leg from head of fibula to top of external malleolus, 16 in.; greatest circumference of calf, 14 in.; circumference of ankle, $11\frac{1}{2}$ in.; greatest length of foot, 12 in.; circumference over heel and instep, $15\frac{1}{2}$ in.; circumference of foot over back of toes, $10\frac{1}{2}$ in.; greatest width of foot, $4\frac{1}{2}$ in.; circumference of great toe, $5\frac{1}{2}$ in.; circumference of middle toe, $2\frac{3}{4}$ in.; circumference of little toe, $2\frac{3}{8}$ in.; length of nail of big toe, $\frac{3}{4}$ in.; breadth of nail of big toe, 1 in.; length of great toe, $2\frac{1}{2}$ in.; length of second toe, $1\frac{1}{2}$ in.

Thorax and abdomen.—Circumference of neck, 17 in.; circumference of chest, $41\frac{1}{2}$ in.; circumference of abdomen, $37\frac{3}{4}$ in.; circumference of pelvis, $39\frac{1}{2}$ in.

Congenital Hepatic Syphilis causing Recurrent and Fatal Hæmatemesis without previous Symptoms. By D.

MCKINLAY REID, M.B., Assistant Medical Officer,
Horton Asylum, Epsom.

T. B—, æt. 28, was admitted into Horton Asylum on April 17th, 1902, and was certified as a case of systematised delusional insanity. She showed well-marked signs of congenital syphilis—prominent, “bossed”

forehead ; Hutchinson's teeth ; double interstitial keratitis ; deafness (oto-sclerosis?).

She remained a patient for ten years, and only once previous to her fatal illness had it been necessary to send her to bed for any physical ailment, and then because of some septic condition of the toes. On the afternoon of January 4th, 1912, she seemed in her usual health, but shortly after tea she had a sudden and brisk hæmatemesis and became considerably collapsed. She was transferred to an infirmary ward, but a satisfactory examination was impossible owing to her restlessness. Three days later hæmatemesis again occurred. Her general condition was better, however, and one could examine with more freedom. The abdomen was somewhat tumid and dully tympanitic, except in the epigastrium, which was distinctly dull to percussion. Deep palpation could not be performed as tenderness was extreme and rigidity obtained. Liver dulness was rather depressed. Treatment was continued on the previously formed assumption that the case was one of gastric ulcer, but on the 14th she had a third attack of vomiting, fully a pint of dark blood being put up. During the next twenty-four hours recurrences took place, and on the morning of the 15th she had a sudden collapse and died.

The cause of death was found in the liver, which was in a state of coarse cirrhotic distortion, due to gummata. Contraction of the fibrous tissue had divided the organ into numerous rounded masses—an approximation to the "botyroid" type. In the right lobe anteriorly much of the degenerated gummatous tissue had become quite mortar-like, and required a saw to section it. The portal vein was partially obliterated, and as a consequence the lower œsophageal veins had become dilated and tortuous, and there were many points from which blood had recently oozed. The stomach was atrophied, and contained a small amount of altered blood, but the wall was quite free from any ulceration. Kidneys were slightly congested, and showed some dilatation of the pelves and adhesions of the capsules. There was perisplenitis, but the organ was not enlarged. Uterus was healthy, and evidence of scarring on the os or vaginal wall absent. The amount of peritoneal fluid was normal.

Recurrent hæmatemesis, due to ulceration of varicose œsophageal veins, is common enough in ordinary hepatic cirrhosis, but as a rule one finds one or more concomitant physical signs—œdema of legs, ascites, enlargement of spleen, albuminuria, etc. The absence of these and the unusually localised nature of the venous obstruction was due presumably to compensatory union between the portal system and the systemic veins.

Fracture of Four Ribs in Sequence due to Tubercular Disease. By D. MCKINLAY REID, M.B., Assistant Medical Officer, Horton Asylum.

S. J. B—, æt. 24, had been admitted into Horton Asylum as a case of dementia præcox on July 12th, 1905. She had well-marked persecutory ideas, and was for the most part turbulent, resistive, and impulsive.



Rib showing tubercular disease, with complete fracture caused by the lower deposit.

To illustrate Dr. McKINLEY REID's paper.

Adlard & Son, Impr.

but she at times showed katatonia, and had on occasions to be sent to bed on account of cyanosis and swelling of the feet. On May 2nd, 1910, she was found to be suffering from phthisis affecting both apices, and so rapidly did the disease progress that two months later only the right lower lobe was unaffected. On August 12th while the chest was being examined she complained of pain in the right side. A small, slightly raised swelling was detected over the middle of the third rib. It had a "boggy" consistence, and very slight pressure on it gave rise to crepitus. Tenderness and crepitus were elicited in the fourth rib also. Careful inquiry was made about any recent injury. It was thought that she might have been struck a few days previously by the patient in the next bed when they had had a verbal set-to; but she had never complained of pain, and at the time of examination there was no evidence of bruising. Accordingly a diagnosis of pathological fractures was made, the presumption being that the ribs had become secondarily invaded by tubercle. Within the next few months her general condition became much worse and undoubted signs of secondary tuberculosis manifested themselves. She died on December 30th.

At the autopsy the second, third, fourth, and fifth right ribs showed tubercular deposits, these having caused complete fractures in the case of the first three. In the fifth caseous material had replaced only one side of the dense bone and separation had not occurred. The third rib (*vide* photograph) contained two separate foci, and in one of these uniform softening had taken place with the formation of a cold abscess subcutaneously, the bone having been split raggedly across. In the other a condition similar to that in the fifth rib was found. The ribs on the left side were quite sound.

The case is interesting for several reasons. It affords a good example of the deep anæsthesia found frequently among the insane. Even making allowance for the poor chest expansion which she had, it is surprising that pain was complained of for the first time only when pressure was applied and that possibly some time after the fractures had occurred. In spite of the frequency with which phthisis and its secondary developments occur in asylums an affection of rib appears to be rather uncommon, and of several rare. It seems not unlikely that the peculiar sequence was due to direct infection from the neighbourhood, probably the pleura.

Occasional Notes.

Legislation for the Feeble-Minded.

I VENTURE to offer to the Editors a few notes on the present phase of legislation for the feeble-minded, for the benefit of

those who have not had the opportunity of following the progress of events, especially in the last month or two.

Three Bills have been brought forward and printed at this date, October 1st, 1912. They are entitled :

(1) The Feeble-minded Persons (Control Bill), presented by Mr. Stewart.

(2) The Mental Deficiency Bill, presented by Mr. Secretary McKenna on behalf of the Government.

(3) The Mental Defect Bill, presented by Mr. Hills.

These Bills at the present date stand as follows :

(1) Has been read a second time, and referred to Standing Committee "B" of the House of Commons. It has been considered and amended, and is now ready for report to the House.

(2) Has been read a second time, and referred to the same Committee. It is now under course of critical consideration by that Committee.

(3) Has been withdrawn altogether. It was, perhaps, the most workmanlike of all the three, but it weighted itself too much by repealing and re-enacting all existing lunacy legislation in order to bring lunacy and mental defect into line with each other in a complete Act. The effect of this, no doubt, would have been good, in so far that it emphasised the need, for which we have contended, to recognise the fact that mental enfeeblement is included in mental disease, which may develop in all degrees between downright insanity and mere mental hebetude. The complement of such a principle is administration, regulation and treatment under one law, and by one Board of Control, with appropriate provisions for each variety. But undoubtedly the work of reproducing lunacy law, as at present settled, in another shape would have opened the door to unsettling the delicate machinery which works quite reasonably well. In addition, the mere alteration in shape would entail much vexation, especially to those of the clerical staff, who have to work under sections best known to them by their numbers. The Bill aimed at representing the views of the Royal Commission on the Feeble-minded, and as the report of that body is so universally accepted, it would be a pity if any of the recommendations therein were to be missed by the withdrawal of the Bill. But it happens that one of those who were prominent members of the Commission, Mr. Dickinson, is also on the

Standing Committee; thus, no doubt, the guiding principles of the report will not be entirely lost to sight.

Thus there are only two Bills now viable, and it is well to remember that there are two, for it is not quite outside the bounds of possibility that when the difficulties, financial and administrative, are recognised, it may be thought that the spirit of No. 1, with some strengthening, may meet circumstances better than that of No. 2. There are very essential differences between the two Bills, which, for easier identification, I will call Mr. Stewart's (No. 1) and the Government Bill (No. 2) respectively. Parenthetically I should desire to say that this latter term, which is much used, must not be taken to imply any origin that would in itself arouse in some a feeling of suspicion and resistance. It is quite apparent that business is meant in all parts of the House, and that there is a genuine intention to give effect to the admirable work done by the Royal Commission. There is no danger to be anticipated from party feeling: on the contrary the Home Secretary obtains support as well as criticism from members of all parties. The temporary and close association, for the latter purpose, of two representatives from opposite camps was the subject of some banter; nevertheless, the joining together of all sorts and conditions, whether for or against the Bill, solely on its own merits, is an obvious element which makes for a really good Act if time be taken over it. It is perhaps true that there is a little inclination to claim that the liberty of the subject is chiefly in the keeping of one or other school of thought, but we know better. In dealing with this particular subject, which in itself is likely to be one of the chief battle-grounds, it may be well to point out that the liberty of the greatest number of responsible workers who are of value to the State is best secured by depriving of his own liberty one who abuses it or interferes with that of others. Liberty has its duties equally with its privileges. From the histories which we obtain as asylum officials, we know how many wage-earners are deprived of their liberty, even of their power to work, by the dread of, and the responsibility for, the possible acts of one individual, whose services are not of the least value to them, himself, or the State.

The main differences between the two Bills were set out by Mr. Secretary McKenna himself thus:

"The proposals of this Bill differ from the other Bill in this respect, that they throw compulsion on the local authority to inquire into the feeble-minded in its area, keep a register of them, and provide for them and maintain them. The only limitation on this duty is the limitation of the amount of money which is provided by the State. All these points find no place in the Bill introduced earlier in the session. Under this Bill it is proposed to find £150,000 out of the Exchequer. Add to that the burden which will be thrown on the local authority and you have a sum which will provide a considerable number of homes which will and must deal with the feeble-minded. In the Bill introduced earlier in the session there were no means of compulsory powers and no means of meeting the cost, as a private member's Bill could not throw any charge on the Exchequer. We provide both compulsory powers and the means of discharging them."

In another part of his speech Mr. McKenna said :

"In this Bill there is the element of compulsion. The first compulsion is on the local authority to inquire and investigate as to feeble-minded persons within its area, and to provide for them. There is a limitation, however, to the duty which is imposed on the local authority. There is no compulsion on the local authority to provide and maintain homes for the feeble-minded persons beyond such a number as the State contributes for. It was felt that with so many charges on the local authorities at the present time it would be too burdensome to impose upon them a new duty with a large heavy charge, unless at the same time the State contributed towards the cost. There is, therefore, this limitation of the duty of a local authority. They need not provide for and maintain the feeble-minded persons in their area beyond the number to which the State contributes. There is power given to them to provide for all the feeble-minded in their area, but there is no compulsion to exercise the power if their means do not admit of it."

The word "compulsion" is not only a strong term, but one which might be called harsh. It arouses instantly some resistive distrust, and it may well cause alarm when the rate-payers recognise the total cost of what is sought to be done, so clearly coupled, as it is above, with compulsion. In the present instance it has a comical aspect. The local authorities

by various Sections of the Bill are told to learn their duties and carry them out religiously, and if they do not do so the Home Secretary will soon know the reason why and compel them. But their obedience to law need not go further than a few pounds will carry them. £150,000 per annum is to be the extent of compulsory perfection for all England, Wales and Scotland.

Assuming that the threat of the thick stick is needful in order to bring some authorities up to a sense of their duties, does not this limitation itself suggest cessation from further action after the limit has been reached? But as a matter of fact we may expect that a very large amount of good work will be done apart from compulsion by most, if not all authorities, when their opportunities for so doing are properly facilitated.

Undoubtedly much has been done voluntarily and without compulsion by some authorities. One has only to mention the Metropolitan Asylums Board to give an example of really efficient service thus rendered to the State. It is true that in this case there are legal powers for the purpose that do not exist elsewhere. Full advantage has been taken of these, and the work done in respect of all classes of defectives shows that the right spirit actuates the efforts of the local administrators. So, too, in spite of the absence of these provisions, much good has been done elsewhere, and in the right spirit. The existence of this praiseworthy attitude is shown by the efforts, more or less successful, of voluntary associations, of which many exist in large towns. But in all areas the work has been hampered, and in most omitted, for one particular reason. It is the universal opinion that all work done for juvenile defectives is utterly wasted in view of the loss of legal control at the early age now obtaining. The power to extend supervision beyond that age, when required, is the most valuable asset of both Mr. Stewart's and the Government Bills. Given this power, together with some further power to deal with those who require care at any age, it may be hoped with more than a little confidence that voluntary effort will carry most authorities beyond the limited point determined by the small grant in aid. It has to be remembered that the *personnel* of local government has rapidly improved. There are many intelligent men, who spend much time in considering and pursuing such reforms, now on the various bodies. Their presence

on boards of all kinds serves to shame and beneficially to influence those who simply study the rates. Such a question as that now being treated would surely attract their best attention, and would evoke that voluntaryism which gives far better results than compulsion.

When we come to analyse the nature of the pressure which may be brought to bear, it only amounts to that which has existed in the Lunacy Law since 1845. The Act passed that year threw on local authorities the duties of providing for and maintaining all the insane of the districts whose cost falls on the public. An enormous amount of money has been spent in building ample accommodation, and this has been done voluntarily or with a minimum of pressure, until it may be said that all authorities have made satisfactory arrangements. The pressure must, under the Bill, commence with the Board of Control, the Home Secretary being allowed to use his powers only on the report of the Board. The Bill in itself recognises that all cannot be accomplished at the outset, as shown by its limiting the need for present action to the value of the present grant. Further, it eases the way for local authorities by allowing the cost to be spread over sixty years instead of thirty, which is the present limit under the Local Government Act, 1888. Yet, again, it recognises that the burden of providing the necessary accommodation may be such as to cause some authorities to outstep their borrowing powers under the same Act, and it provides accordingly. In one sense this very form of compulsion is a great safeguard against undue pressure. Without it, it would be possible for anyone seeing an authority in default to agitate until necessary steps were taken; with it, no one but the body which knows all the circumstances can say a word.

But in spite of all this the word "compulsion" must attract attention to the proportion which the proposed grant of £150,000 bears to the total probable cost. This divides itself into two heads—(1) Providing accommodation, and (2) maintenance, including in the latter wages and maintenance of the necessary staff. As to the first I take the estimated figures of the Royal Commission. By these there were in 1908, when its report was issued, 66,509 defectives of various classes who urgently needed provision being made for them. We may assume that during the period elapsed since then the number

has grown to 70,000. The Royal Commission on certain data estimated that proper accommodation could be built for £100 to £120 per bed. But the instances on which they founded that estimate showed a considerable shortage in land, which is so essential for the education, occupation and support of many, if not most, of the defectives to be cared for. A careful survey of the work of the Metropolitan Asylums Board in regard to its mental patients shows that at the four large asylums of Tooting Bec, Leavesden, Caterham and Darenth, the cost for land and buildings works out at about £163 per bed, about one-seventh of the total being for land. As no doubt some of the children's homes would cost less, the probable cost for all their defectives would amount to £150 per bed. The four asylums may be taken as fair samples of what has to be faced, for the expense of the more recent asylum at Tooting Bec is at least outset by that incurred forty years ago for the cheaply built Leavesden and Caterham. On this estimate the total expenditure to be incurred under the Bill will amount to considerably beyond £10,000,000. Since it will be needful to build for more than present necessities, we may take £11,000,000 as the sum wanted in course of time to meet all needs. The repayment of capital and interest (at $3\frac{1}{2}$ *per cent.*) during, say, fifty years, will need a yearly payment of about £450,000. I take fifty years rather than the maximum of sixty, since some of the expenditure will be made in respect of furniture, fittings, etc., of a perishable nature, for which such a long time as sixty years could not be reasonably asked. For to the cost of maintenance, the Royal Commission estimated for an increased expenditure of about £550,000. The two costs, therefore, would together amount to £1,000,000 annually. It will thus be seen that the grant bears but a small ratio to the total, and it is altogether too small for compulsion to be talked of with a sense of proportion, the more so since legislation is called for by the nation for the general good of the nation itself. It is, of course, true that in essence a local area is deemed to be responsible for the well-being of its sick, but, admitting this, it would seem right to think that there are two parties involved equally in this matter and that each might bear a moiety of the cost. I note that an amendment having this effect stands in the name of Captain Clive.

The financial aspect of the Bill does not concern medical

experts so much as others perhaps, nevertheless the experience of those in medical charge of defectives may serve to point out some particulars raising hopes which are not likely to meet with fulfilment.

In his second-reading speech Mr. McKenna said :

“In order to start the local authorities in this work, it is proposed that there should be a payment by the Exchequer of £150,000 a year. That will greatly assist the local authorities in dealing with those feeble-minded persons. There will no doubt be the economies in respect of those who will be taken out of workhouses, and further economies in respect of those taken out of lunatic asylums and prisons. We must also remember that to a considerable extent the feeble-minded homes will be self-supporting, and therefore I am not without hope that while this grant of £150,000 will not, and cannot, cover the whole ground, it will be a sufficient sum to enable local authorities to make a real substantial start in the work that lies before them, and to meet to a certain extent the cost in the first years of the Act.”

The particular statement which first calls for criticism is that in which the Home Secretary looks forward to the feeble-minded homes being to a great extent self-supporting. It is not quite clear whether the term “feeble-minded” is meant to include only those who are defined in the Bill itself as coming under it—persons who may be capable of earning their living under favourable circumstances through mental defect existing from birth or from an early age—or whether it is meant to include, as the context suggests, all the subjects of the Bill. But in either case experience shows that little help can be got from the workers, certainly not sufficient to keep them in board, lodging and supervision. If the term is used in the larger sense it is at once certain that any profit from the labour of the few profitable workers will but little affect the expenses of all, and it is when dealing with the total expense called for by the Bill that the Home Secretary advances his statement. Obviously it is the income made by the total defectives which counts when considering for practical purposes the net cost to the ratepayer. The operations of the Metropolitan Asylums Board can again give us some valuable information on several questions of cost of providing and maintaining, and of the return made by working defectives. It may be said that these

operations cannot be taken as a fair example. I do not know why they should not, for the Board is progressive, working hard to fulfil its duty as well as to satisfy those whom it represents. Further, it presents an instance of the most advanced dealing with a comprehensive variety of all those whom it is sought to bring under the new Act excepting those who are under the care of the educational authorities ; and it, in Darenth, presents an example of the most scientific and financially successful endeavour to extract profit from damaged brains ; it is, as far as I know, the only body which deals with the total mental deficiency of the area which it covers, irrespective of those who are kept at home, undeclared, or who are at school. It deals with almost all those who will be enumerated by the Act, seeing that it embraces, with the exception of less than 2 *per cent.* of the total mental defectives (who are retained in the ordinary workhouses), all those who do not come up to the lowest requirements for admission to the asylum. Taking the figures for 1911 the Board deals with 580 children in homes and 5,800 of all ages in the various asylums. At two institutions, Darenth and Bridge, the latter being for children, there are considerable returns made from the patients' work. At the former such a return is made of £3,354, of which £2,478 is made in the shops solely by patients, and the balance is made on the farm, where no doubt sane paid labour contributes much. Yet this return only lowered the total maintenance cost at Darenth by about 6 *per cent.*, all capital charges, special expenditure and central office expenses being ignored. On the total cost of the defectives the return lessened expenses by under 2 *per cent.* The weekly cost at Darenth amounted to 9s. 7d. after the return had been deducted. This fairly corresponds with the rough estimate made by the Royal Commission, but it is a little difficult to see where there is likely to be economy in transfer of inmates from asylums and workhouses to the new institutions. It is true that some of those transfers may bring with them some valuable labour, but that will only deprive the asylum of the same value, and will necessitate in the latter the hiring of more expensive labour to do the simple work which had been done by the inmates for their board only. The ratepayer will not in the end find much economy from the transfer.

There was yet another, and even more important, difference between the two Bills. I refer to the composition of

the Board of Control. That difference has happily to some extent disappeared, unless it be revived by a higher authority than the Standing Committee "B." This contingency, however, is not probable. At the outset of his introduction of the Bill to the Standing Committee, Mr. McKenna, after reviewing his reasons for proposing the composition of the Board as it appeared in the original Bill, announced that he had altered his opinions, and moved that the Board should consist of the present eight paid Commissioners, four other paid Commissioners, with three others, fifteen in all. The chairman is to be paid, and one of the Board shall be a woman. The question as to which section of the Board is to supply the lady is not quite clear, but apparently it enacts that she shall be medical. Thus there will be placed at least five medical members on the Board for the present, as it is intended to appoint the four present medical incumbents right away. The exact composition of the Board, outside the appointment of the present paid Commissioners, is still under debate, and there appears to be some desire to reduce the number.

In this connection it is right to state that the work of the Lunacy Commission was fully and worthily recognised in the debates. Much trustful reliance for the working of the new Act, as well as of those already in existence, was expressed. I have reason to know that the trust in the Commissioners is so great in some quarters that there may be some desire to leave a good deal of the details in the matter of classification and administration which should appear in the Act itself. But whatever the amount of advice that may be asked for and given by the Commission, it would obviously be necessary to define the limits in every direction with the greatest precision and formality. Nothing could more readily lead to distrust of the Board than being called on to interpret broad directions laid down by the Act, instead of being called upon simply to apply the Act as given to them. We know how patients, and even their friends in some instances, despise the judgment of the present Commissioners when their opinion does not coincide with the feelings of the patient on the question of sanity. However justifiable the steps to be taken under the new Act may be in the eyes of disinterested persons, it is quite certain that considerable irritation will be aroused in many to whom the Act may come home. Beyond these, sympathetic neigh-

bours will be disturbed and distressed by unfortunate defectives being, for reasons not very obvious to them, deported to a distance, possibly for ever. On all grounds it is essential that the clearly cut directions of the law should be behind those who have to administer it.

So far there has been little, if any, expression of the idea that persons can now be locked up unwarrantably. As the scope of the discussion, both in the House and in the Committee, allowed full opportunity for such an expression, we may take it that the idea is practically non-existent or at least confined to a few.

The Bill does not specifically propose the appointment of Assistant Commissioners, but there is an amendment down for this purpose. Such help will be urgently needed to meet the great extension of duties imposed by the Bill.

Though the principles of the original Bill, on which the first composition of the Board was decided, have been overcome, as shown above, yet some of them are recalled by a proposition made verbally to the Standing Committee by the Home Secretary, when he announced his desire to revise his first views. This proposition is now set out in an amendment standing in his name, *viz.*:

“ For the purpose of the exercise and performance of such of the powers and duties of the Board as may be determined by the Secretary of State to be of an administrative nature, there shall be established an executive committee of the Board (in this Act referred to as the Executive Committee), consisting of a chairman and such of the Commissioners not exceeding four as the Secretary of State may appoint, to which shall be entrusted the executing and performance of all such duties as aforesaid, subject as aforesaid.”

Thus at the very outset, the body which we hoped to see homogeneous and experienced is cut in two. Some of the Commissioners have powers which others have not. This process of disintegration is not to be confined to the powers conferred under this Bill, but is to be extended by an order of His Majesty in Council to all the powers and duties of the Commissioners in Lunacy under the Lunacy Acts, 1890 to 1911, and the Idiots Act, 1886. It is not difficult to conjure up circumstances under which friction between the two authorities may occur, but we can go to history of some years

back to find one concrete example. The Commission of that day had strong views as to the size of asylums into which curable cases were to be admitted, and expressed those views in relation to an asylum proposed to be built by the London County Council. Nevertheless, the plans were passed, over the heads of the Commission, by the Home Secretary of the day. The establishment of independent authority in two parts of one Board is further evidenced by an amendment which provides that any inquiries empowered by the Act may be held by the Board or the Executive Committee or any two Commissioners. It is difficult on analysing the particulars of an administrative nature to find any which cannot properly come within the scope of the whole Board. Undoubtedly, money was at the back of Mr. McKenna's mind when he gave as a reason for setting up the Executive Committee the fact that public money was going to be spent under the Act, and thus responsibility to Parliament of the officer of State (himself in this instance) is entailed. If he wants any official explanation or account from a section of the Board, it is not easy to see why he should not have the Board's views and actions reported to him by a finance committee appointed by the Board itself. There would then be responsibility on the whole Board. If, on the other hand, he is only to listen to one section of it, the other members will be bound by the action of their few colleagues, and thus probably the prestige of the Board itself may suffer. It is suggested that very real risk of misfortune may arise from the uncertainty and possible want of unanimity for which opportunity is thus given. No doubt the Board will have occasional differences of opinion among themselves, but these will be settled privately in the ordinary way. The possibility of difference of opinion between the Board and its Statutory Committee being made public is much to be deprecated.

Undoubtedly clause 17 is the most important part of the Bill, seeing that it settles the limits within which its operations are to take place. The importance of the clause impressed itself on some members of the Standing Committee so much that they asked for its being taken at the very outset. However, it was ultimately agreed that after the composition of the Board with matters contingent thereon had been settled, this clause should be taken next. Accordingly its consideration

may be looked for in the early days of the resumed sittings of the Committee in October.

It is impossible to discuss its many and intricate phases without the actual words before one, and therefore it is set out in full.

17.—(1) Save as expressly provided by this Act the following persons, and no others, shall be subject to be dealt with under this Act, that is to say, persons who are defectives and—

- (a) who are found wandering about, neglected, or cruelly treated ;
 - (b) who are charged with the commission of any offence, or are undergoing imprisonment or penal servitude or detention in a place of detention, or a reformatory, or industrial school, or an inebriate reformatory ;
 - (c) who are habitual drunkards within the meaning of the Inebriates Acts, 1879 to 1900 :
 - (d) in whose case, being children discharged on attaining the age of sixteen from a special school or class established under the Elementary Education (Defective and Epileptic Children) Act, 1899, such notice has been given by the local education authority as is hereinafter mentioned ;
 - (e) in whose case it is desirable in the interests of the community that they should be deprived of the opportunity of procreating children ;
 - (f) in whose case such other circumstances exist as may be specified in any order made by the Secretary of State, as being circumstances which make it desirable that they should be subject to be dealt with under this Act.
- (2) The following classes of persons shall be deemed to be defectives within the meaning of this Act :
- (a) Idiots ; that is to say, persons so deeply defective in mind from birth or from an early age as to be unable to guard themselves against common physical dangers ;
 - (b) Imbeciles ; that is to say, persons who are capable of guarding themselves against common physical dangers, but who are incapable of earning their own living by reason of mental defect existing from birth or from an early age ;
 - (c) Feeble-minded persons ; that is to say, persons who may be capable of earning their living under favourable circumstances, but are incapable, through mental defect existing from birth or from an early age :
 - (i) of competing on equal terms with their normal fellows or ;
 - (ii) of managing themselves and their affairs with ordinary prudence ;
 - (d) Moral imbeciles ; that is to say, persons who from an early age display some mental defect coupled with strong vicious or criminal propensities on which punishment has little or no deterrent effect ;
 - (e) Mentally infirm persons ; that is to say, persons who through mental infirmity arising from age or the decay of their faculties are incapable of managing themselves or their affairs.

I do not propose to criticise the clause in anything like an exhaustive manner, but merely wish to make one or two general points which may have a large bearing on the scope of the Bill. No doubt our Special Committee will continue the close examination which it has commenced.

One such point is the use of the word "defective." It will be observed that in the opening of sub-clause (1) it is used in the sense assigned to it in clause 1 (1), "within the meaning of this Act," being immediately tied down for the purposes of treatment under the Act by certain qualifications or accessory conditions. Next, in sub-clause (2) the term is more specifically defined. Thus, we get two distinct ideas conveyed by the term. Thus, there are two distinct conceptions of deficiency: Deficiency within the meaning of the Act; deficiency within the meaning of the Act, and further qualified as in sub-section (1). This is a matter of cardinal importance. Naturally the term itself will be met with in all parts of the Act, and its careless use may alter the operation of the Act to almost any extent. It is absolutely necessary that whenever it is used its precise meaning should be accurately weighed before it receives full force by law. To take a striking instance: Clause 12 (a) directs the local authority to "ascertain what persons within their area are defectives and are subject to be dealt with under this Act," and (c) to "keep registers of defectives." To carry out the latter direction in its full sense it would be necessary to carry out the first direction much farther than is intended by the Act. All doubt would be removed if the word "such" were inserted before "defectives." Perhaps such a limitation would not satisfy the eugenists, who would probably wish that for their purposes the registration of the second class of defectives should be noted as well. It is much to be hoped for that the excellent principles of the eugenic body should not be imperilled by general mistrust arising from too vigorous application of detail. It is quite evident that these principles have already awakened a certain amount of dogged opposition to much that may be useful. Another example of the unlimited use of the term is found in clause 5 (a) which provides that the Board shall "exercise general supervision, protection, and control over defectives," thus bringing into control many who by the Act are not to be subject to treatment under the Act.

Mr. Dickinson has put down an amendment to the opening sentence of sub-clause (1) by which he would delete the word "defective" and substitute the words "idiots or imbeciles or feeble-minded." This proposal limits the application of qualifications or the accessory conditions to the first three of the five classes set out in sub-clause (2). By a further amendment Mr. Dickinson would apply the Act directly and without the qualifications to (4) moral imbeciles and (5) mentally infirm persons who are in need of care or control. One would suggest that the moral imbeciles to be dealt with should likewise have the qualification for need of care and control, since the definition of moral imbecility, even when strengthened by the substitution, proposed by Mr. Dickinson, of "habitual" for "strong," is still too wide. Most of us know silly and purposeless liars who get on fairly well without control, but might be dealt with under the Act as "displaying some mental defect" by their silliness coupled with the "habitual vicious propensity" of mendacity. If this actual need of control or care is made a *sine quâ non* all through instead of the operation of the Act being determined by a mere academic definition, much of the existing doubt and distrust will be disarmed.

It may be said, further, that the power to detain under care or control those who at present pass from official supervision at an early age will obviate many difficulties in applying the Act at a later period of life. If defectives are caught up in the beginning of their career and are kept as long as may be necessary under control, there will be fewer at large to require control at later stages. For instance, most of the women, who under the Act are not to be permitted to procreate, will be under circumstances requiring no further restrictions, while the imbecile male will be in a safe place. The dealing with the latter *de novo* will be one of the most difficult of the problems to be solved.

Then with regard to the old folk, is it really necessary to do more with them than to create powers for dealing with them only when it may be absolutely necessary? The procedure suggested by Mr. Dickinson will obviate much disturbance of existing circumstances, which circumstances the Royal Commission admits are in many instances quite satisfactory: it will obviate much expense, which cannot well be afforded in compulsory shifting of patients between asylum, workhouse and new institu-

tion; and it will also obviate much of the irritation and mistrust which is engendered by the difficulty of foreseeing to what extent the Act will carry us. On the other hand, it will bring together and concentrate the best endeavours of all parties to deal with early deficiency, for in all quarters the interests of the young are considered to be paramount.

Mr. Dickinson carries out this care for the young by a further amendment giving power to the Board to apply the whip to those education authorities who are behindhand in providing special care and instruction for such of their children as may require them.

Again dealing with clause 17 in a general way, it may be pointed out that it does not go far enough in one direction and goes too far in another. Sub-clause 1 (a) is far too restrictive in that it does not include those cases which ought to be moved perhaps on account of their surroundings not being sufficiently good, and which cannot by any possible stretching of terms be brought within the conditions of "wandering about, neglected or cruelly treated." Incidentally the wording of the provision seems to be unfortunate and to require an "or" between "about" and "neglected." It would obviously be impossible to bring workhouse or asylum cases within this provision, and yet it is the only one under which an attempt could be made to deal with them. Some words are required to be added to bring in as a qualification the need of better treatment or environment. Once again there really is no provision for enfeeblement of mind, mild or marked, arising from physical disease such as apoplexy, or from the severity of antecedent insanity, or from past alcoholism and the like, unless, indeed, it is covered by "decay of their faculties." But to bring such cases under that term would be about as correct and illuminating as to describe the loss of an eye from a gun-shot wound as blindness arising from decay of the power of sight. This omission in itself will defeat the proposal to transfer middle-aged chronics from asylums to new institutions.

Then the clause covers a great deal too much, in that it applies the Act and the treatment under the Act to all idiots, imbeciles, etc., without any regard whatever to such features as dangerous proclivities. We know well enough that it is the quiet, smiling, mild-mannered imbecile who sets fire to haystacks to see them burn, who assaults and possibly murders

little girls, who cuts and wounds cattle and horses. Yet, as the Bill stands, all these are to be provided for as defectives under the conditions laid down by the Bill. In fact, there is much danger that the proposed Act will offer opportunity of putting into the new institutions some of those who are only fit for asylums. It would seem to be ungracious to suggest that economic considerations should be allowed to weigh in such a matter. But we cannot forget that in the old days the four-shilling grant, which was given to induce poor-law authorities to send recoverable cases at once into asylums to promote recovery, not only answered that purpose, but led to the sending of all forms of insanity to the asylum, thereby blocking them up with chronics, and thus leading to the present demand for relief through cheaper accommodation; it would indeed be irony on human nature if the present bait of economy led to the exactly reverse operation. It would seem to be proper that careful provision should be made against all risk of the mixing up of cases, and it might be well that the certificate to be given by the medical practitioner should be framed so as to ensure that a choice between the two lines of detention must have been made by him on special and critical differentiation. In this relation some mention should be made of the curious provisions whereby the Board (clause 5) is directed, and the Home Secretary (clause 34) is empowered, to provide and maintain institutions for defectives "with criminal, dangerous or violent propensities." Such provision is right and proper as regards criminals, but what are ordinary asylums built for except to deal with dangerous and violent defectives? There can be no classification of dangerous and violent propensities in terms of defect or lunacy; on the contrary, classification must be between defects in terms of danger or violence. By practice and common-sense the defective is regarded as a lunatic, or at least fit for treatment as a lunatic, when he becomes dangerous or violent. Verily, if it is sought to remove harmless chronics on the one hand and the dangerous on the other, the usefulness of asylums of all kinds has departed.

Perhaps a word may be said about the term "imbecile." As will be seen it is used in the Bill in the strict sense, importing early incidence of the deficiency. But it is by no means sure that the ordinary layman thus restricts its meaning. Thus a

wrong impression may be easily entertained by one who makes a survey of this form of deficiency in any area, unless he has had the opportunity of studying the precise terms of the Bill.

Some objection has been taken to the wideness of the sub-clause (1) (*f*); in fact this clause is sure to be subjected to strong criticism, as it was in the second reading debate. An amendment has been put down for its total deletion. It is to be hoped that there will be some provision of the kind to take note of feeble-minded persons, especially girls, who inherit money and run risk thereby from schemers. It will be remembered that some years ago, the Parliamentary Committee, on being informed on high authority that there was no legal protection for such persons, made representations that Sect. 116 of the Lunacy Act might well be extended to cover them. The idea was favourably received by the authorities, and it would be a good opportunity to make such provision now. It has to be noted that the lot of anyone dealt with under the Act may take the shape of being placed under guardianship and not necessarily of personal detention.

There seems to be almost entire absence of provision for the discharge of defectives from institutions, or for removing names from the register. I note that the Home Office stated in an interview with the representatives of the County Councils Association that the latter omission will be rectified by regulations to be drawn up by the Secretary of State.

Mr. Dickinson has put down a valuable series of provisions for voluntary submission to treatment. He has also another series dealing with the institution of receiving-houses or wards for defectives, in which they are to be subjected to observation and temporary treatment. The admission into these seems to be sufficiently guarded, but does not require the greater formality of the ordinary procedure under the Act. The medical officer of the local authority will inspect the patient immediately after he has been admitted on the certificate of the medical officer of the receiving house. The former will decide how the patient is to be dealt with. The idea is an excellent one, which will probably save expense. It is to be feared that recovery will not often be one of the benefits such as are hoped for from the proposed receiving-houses under the Lunacy Acts. For this purpose the local authority may demand from any public body (including guardians and borough councils) the

use on terms of a building or part of a building, or it may provide the accommodation itself.

On clause 42, which applies the Asylum Officers Superannuation Act of 1909 to institutions certified under the Act, Lord Wolmer seeks to graft many of the provisions of the Bill brought in by him for regulating the hours of asylum service. This will have to be narrowly watched by our Parliamentary Committee as before.

There are altogether twenty-five pages of amendments put down. But a great number of these are unimportant, being drafting amendments of those consequent on matters already settled. But one long series aims at preserving intact the provision of existing institutions for idiots, imbeciles, and feeble-minded, the interests of which are imperilled, though probably without any such intention, by the language of the complicated arrangements for the various forms of new institutions. It is very evident that these places, many of which have done so much for juvenile defectives, have warm friends on the committee, as they deserve to have.

With much diffidence I venture to suggest that an ideal Bill should contain the following among other fundamental clauses :

That the whole scheme as finally adopted for dealing with defective children, together with all the provisions for their detention and maintenance when necessary after they pass from childhood, be made absolutely and immediately compulsory.

That the dealing with adults and old people, other than those detained from their childhood, as above, be made permissive for a period of, say, five years. During this time it would be seen how far voluntarism with all its advantages serves to bring about the desired ends. There would be thus valuable opportunity for discovering by varied experience the best methods of treatment, the most suitable forms of institutions and institutional life and so on. Above all it would afford time to make a correct estimate of the amount of accommodation which would eventually be required. The respite would give local authorities time to take up the great burden thrown on them. We may reflect on what would be the position of the insane, compared to what it now is, if all asylums had been built compulsorily and immediately on the passing of the 1845 Act, even if they had been built on the best model of

that day. At the end of the period it might be necessary to apply stimulus, or, on the other hand, the permissive stage might be prolonged.

That suitable contribution should be made by the State, on the footing of the nation being at least equally responsible with its component parts for carrying out a vast reform, which would benefit all.

That all division of the controlling authority be removed by removing the cause of that division. Assuming, as I think may be correctly assumed, that the granting of a sum of public money is the only valid reason for establishing an executive committee, it would not be difficult to remove that reason by providing (a) that all State contributions should take the form of *per caput* grants, which would bring these grants into line with those now given in respect of asylum patients. The existence of such grants has not hitherto needed the establishment of an executive committee of the present Board of Lunacy; and (b) that the Home Office Department should continue to have the care of the criminal defectives. The only other money provision in the Bill is for the payment of the remuneration of the Commissioners and their officers. This is a matter for the ordinary procedure of the Treasury, and it is simply an extension of existing arrangements. As stated before, it is difficult to conceive any other matters, administrative or otherwise, with which the Board itself, as augmented and strengthened, cannot deal.

Finally, I desire to affirm in all sincerity that these criticisms and reflections have not been made in any carping, factious spirit. I, as well as all thinking men, know that some legislation of the kind ought to come, must come, and will come, and that unreasoning opposition would be absolutely futile. He would be a bad neighbour to any Bill, who, finding, or thinking that he has found, defects in it, passed by on the other side in silence. It is quite recognised that there is practical unanimity in endeavouring to make the best possible Act, but it must also be recognised that there are strong forces at work which suggest the need for compromise. Compromise is itself dangerous from the opportunity it affords of masking for the time difficulties which are bound to reveal themselves later on. Some of the forces have been indicated. To them may be added mistrust of eugenisists, mistrust of the medical man, and mistrust of the mental expert.

One hears sometimes that a person in authority announces that he would rather follow the dictates of his own common-sense than the opinion of the most expert of mental experts. That man forgets that the expert also exercises his common-sense, but with the difference that in his case instructed and experienced common-sense is used.

H. HAYES NEWINGTON.

The Annual Meeting.

The Annual Meeting held at Gloucester has again demonstrated how popular with our Association is a visit to a provincial centre in July. Of the many agreeable features of a highly successful meeting we would like to refer especially to the well-informed and sympathetic interest, in the aims of the Association, evinced by the distinguished county and city officials who honoured us by their presence. We regard their attitude as a striking testimony to the value of the work which has been done by Dr. Soutar and by his predecessor at Barnwood House.

The record of the transactions which appears in this number of the Journal shows how numerous are the Association's activities, and how zealously the various officials and committees have worked during the past year.

Dr. Soutar's presidential address contains an admirable statement of his appreciation of the services rendered by British alienists in the domain of psychiatry, and of his estimate of the qualities which make for success in the endeavour to accomplish the highest aims of our specialty. When he deals with the attitude of the State towards scientific research we are reminded of a prominent feature in the history of the progress of the British race, namely, the part played by the individual pioneer unsupported by official recognition. Already we are under deep obligations to such pioneers in our branch of medicine, and we are confident that they and their successors will continue to add to our indebtedness, and will eventually meet with a full measure of official encouragement.

The long-hoped-for legislation to deal with the care and control of the feeble-minded has at last been introduced, and our Parliamentary Committee, with commendable promptitude, appointed a Select Committee, which has worked indefatigably.

and we trust that their efforts will meet with gratifying success. The thanks of the Association, and, indeed, of all who are interested in the welfare of the feeble-minded, are due to this sub-committee, and especially to its Chairman, who opened the discussion on the Mental Deficiency Bill at the Annual Meeting.

As we anticipated, the Committee on the Medical Inspection of School Children has produced a valuable report, which has been welcomed as meeting a much-felt need. Only those who have been associated with the Chairman of this committee know the extent of his devoted labours in this branch of his work.

The subject of mental deficiency and the proposed legislation thereon are so ably dealt with, in various contributions which we publish in this number, that it would be superfluous to comment on these matters in this note.

The Committee dealing with the status of Assistant Medical Officers and the Position of Psychiatry continue to prosecute their inquiries, and hope to present a report to the next general meeting. We publish a paper by Dr. Rows on this subject in the present number.

We have much pleasure in drawing attention to the fact that several assistant medical officers have recently taken the diploma in psychiatry. We propose to publish lists of successful candidates, and to print the special regulations of the various universities which grant this diploma.

We have already expressed the opinion that much good would result from a dissemination of the knowledge we have acquired regarding the prevention and treatment of mental deficiency, and we are glad to announce that the Association has published, in pamphlet form, selected papers and the proceedings of various committees dealing with this subject.

Part II.—Reviews.

An Answer to the Rev. John Baillie, M.A. By CHARLES MERCIER, M.D., F.R.C.P.

It is satisfactory to have drawn at last one professional logician out into the open, and to have elicited at length a defence of traditional logic. Hitherto, logicians have severely boycotted the New Logic, and have met it with a conspiracy of silence. I happen to know that, by

one journal or another, the professor of logic in nearly every university in the kingdom has been invited to review my book, and that each and every one has refused. Of course, the natural inference, to one who does not know the ins and outs of the matter, is that the book is not of sufficient importance to logicians to be treated by them with anything but silent contempt. This would be all very well if it were not that Dr. Schiller's attack had been similarly boycotted. Even *Mind*, a periodical which is supposed, by those who do not know it, to open its columns impartially to every shade of opinion, has taken no notice of either book. It is certain, therefore, that the studied ignoring of our attacks on the Logic of Tradition is not due to any failure on our part to bring the books to the notice of logicians; nor is it because they are the works of amateurs, for Dr. Schiller is himself a logician of eminence; and most certainly it is not because the attacks are not sufficiently thoroughgoing and trenchant to demand an answer. My own interpretation of the boycott is that the attacks are unanswered because they are unanswerable, and I am confirmed in this opinion by perusing the lame attempt of Mr. Baillie to defend the untenable position of ancient and modern logic. If this is the best defence that can be made, the position is already won, and the logicians are wise in their generation in sitting tight and ignoring the attack. Unlike Canute, they do not command the waters to retire; they sit with their backs to the sea and pretend that the tide is not rising because they refuse to see it rise; but their feet are already awash, and it will not be long before they are carried bodily away.

As a general rule, it is bad taste and bad policy for a reviewed author to challenge his reviewer; but in this case the future of an important science is at stake, and if I dispute with Mr. Baillie it is from no feeling of soreness; my withers are unwrung; I appreciate his courtesy and shall try to emulate it; and I value his admissions, somewhat grudging though they are.

Mr. Baillie attributes my disagreement with logic to my ignorance. Of course, he does not put it with such brutal plainness, but this is what he means when he says that in my book the terminology of the logicians is frequently misunderstood, and their thought is caricatured by being superficially interpreted; that I am often attacking a man of straw, a doctrine which is taught by no modern logician in the crude and crystallised form in which I state it. Mr. Baillie says this, but he does not adduce one single instance in support of his statement; and I submit that an accusation of such extremely wide and general character ought not to be made without supporting it by specific instances. An accused person is entitled to particulars of his offence. An indictment charging me with the murder of unspecified persons, by unspecified means, at unspecified times and places, would be bad on the face of it; and any grand jury, even if it were entirely composed of logicians, would be compelled by the judge, if not by their consciences, to find "no bill." A charge of misunderstanding, caricaturing and misinterpreting is equally bad on the face of it, if it is unsupported by the production of particular instances.

That I have always understood the terminology of logicians I will not assert. In fact, I explicitly admit and declare that I do not under-

stand some of the utterances of the exponents of modern logic. When Mr. Baillie says that some of my criticisms coincide with those of modern logicians, I recognise the gravity of the accusation, but I am debarred from any defence by the vagueness of the charge. No instance, no particulars, are given. But when he says that my criticisms are less accurately expressed than those of modern logicians, the accusation is absurd on the face of it. To express oneself less accurately than a modern logician would require, in the first place, a natural genius for confusion of expression, and in the second a long and arduous training in obscurity of thought and diction, to neither of which I can lay claim. Lest my readers should imagine that I am unduly modest, I will requote from p. xiii of my book a triumph of obfuscation, the like of which is far beyond my very moderate powers. "The fundamental activity of thought," says a distinguished exponent of modern logic, is to be regarded "as the same throughout and as always consisting in the reproduction by a universal of a real identity presented in a content, of contents distinguishable from the presented content, which are also differences of the same universal." I would not advise anyone to read this sentence more than a score or two of times. The first hundred or so of times that I read it I thought I must be very stupid. At five hundred times I thought I was a born idiot. At two or three thousand, I came to the conclusion that I was going mad. Not till after ten thousand readings did I discover that though it purports to be English, it is really written in some foreign language with which I am unfamiliar. The Scotch of Burns is not easy to an Englishman; Welsh presents difficulties to one born outside the Principality; ancient Irish presents perplexities to the novice; but a mixture of all three, blended with ancient Chaldee and modern Choctaw, on a basis of Chinese, would be simplicity itself compared with the tongue in which modern logic is written.

So much for Mr. Baillie's first charge, that I misunderstand the terminology of the logicians. His second charge is that I continually caricature their thought by interpreting it superficially. If this means, as it appears to mean, that I accept the dicta of logicians in their plain and ordinary sense, and assume that they mean what they say, I plead guilty to the charge. If it means that I put a gloss on their statements, and pretend that they mean something other than the plain meaning of the words, when they have a plain meaning, then I emphatically deny the charge, and demand the production of an instance. Mr. Baillie gives no instance, and in the absence of particulars I am placed at an unfair disadvantage in defending myself. When he charges me with attacking a man of straw, a doctrine which is taught by no modern logician in the crude and crystallised form in which I state it, my reply is that in almost every instance in which I have stated what I understand to be the doctrines now taught, I have been careful to quote the *ipsissima verba* of the most recent text-books that I could procure—books that are, to my certain knowledge, used by students preparing for examination in the universities. It is true that I have not often given the source of the quotation; but as I have scarcely given one that I have not immediately held up to derision and contempt; and as it was the doctrine, and not the teacher of it, that I sought to deride

and contemn ; I thought, and still think, that it was in better taste not to name the authorities. Anyone familiar with logical teaching will have no difficulty in tracing to their source the quotations, which are, for the most part, distinguished by inverted commas. Apart from this defence, however, the charge of caricaturing the expressions of logicians—I know nothing about their thought apart from its expression—is intrinsically absurd. Most of their doctrines are so manifestly and preposterously wrong that it would not be possible to caricature them. You cannot caricature *Baron Munchausen* or *Gulliver's Travels* ; you cannot caricature Edward Lear or Gammer Gurton ; neither can you caricature the doctrines of logic. They are already caricatures.

But I deny also that I “continually interpret,” whether superficially or otherwise, “the thought of logicians.” Mr. Baillie gives no instance of my interpretation, whether superficial or deep, and therefore I can only conjecture what he refers to. Does he regard my comment on the inverse as a superficial interpretation and a caricature ? Logicians say that from “Every truthful man is trusted” we can draw the valid inference that “Some untruthful men are not trusted.” I say that, if this is so, then from “Every truthful man is mortal” we can draw the inference that “Some untruthful men are not mortal,” and that this inference will be valid. Is this a caricature ? Is this a superficial interpretation ? The reader must judge for himself. I say it is neither ; and I say, moreover, that most of the doctrines of logic are, like this, so manifestly and absurdly wrong that it is impossible to caricature them.

No doctrine of logic is more fully established, is more universally held, or is of greater antiquity, than the doctrine that it is impossible to reach a valid conclusion from two negative premisses. In my book I give a few examples, and could give hundreds more if it were worth while, in which such a conclusion can be, and is, reached from such premisses. Here is one : “No logician agrees with my doctrines ; no logician is infallible : therefore some fallible persons disagree with my doctrines.”

Is this a caricature ? Is this a superficial interpretation ? Let the reader judge. The only way in which a logician can get out of it is by denying that logicians exist. He is welcome to the alternative.

If Mr. Baillie says that these are not the instances he had in his mind, he has only himself to thank. He should have adduced his instances. The Editor of this Journal would not have grudged him the space, I am sure.

Mr. Baillie says that my doctrine, that a proposition expresses a relation, accounts for many strange things. I agree. It accounts for, and explains, many things so strange that they have puzzled logicians from the time of Aristotle down to this present day. Mr. Baillie seems to imply that this is a demerit in my doctrine ; and doubtless, if the object of logic is to set up artificial puzzles in order to bewail their insolubility, my doctrine is distressful ; but if the aim of logic is, as I understand it is, to explain and expound the true course of thought, then the fact that my doctrine explains many strange things is not a demerit, but a praiseworthy quality.

“Dr. Mercier's distinctions (between verbal and real propositions) are

entirely dependent on his apparent unfamiliarity with the accepted definitions of these terms. When this is realised, all Dr. Mercier's criticisms fall away?" In the first place, there are no "accepted definitions" of these terms in the sense that the same definitions are to be found in all, or in the great majority of text-books. In the second place, I gave, *totidem verbis*, three definitions out of authoritative text-books, and placed the definitions in quotation marks to show that they were quoted. In the third place, if we take, instead of these definitions, that which Mr. Baillie says is accepted, the most important of my criticisms still hold good, and in place of those that do not then hold good, others equally destructive may be made.

"We are, at every point, left with distinctions in which no serious student could rest. Externality is distinguished from reality, and the matter is left there." So it is; but it seems to me better to make the distinction and leave it there than not to make the distinction at all, and to confuse externality with reality, as modern logicians do. "The distinction between validity and truth is allowed to remain quite unrelieved." Perhaps it is, and I must confess that I do not know how to relieve a distinction, nor what the difference is between a relieved distinction and an unrelieved distinction. At any rate, the distinction is insisted on, is defined, is made clear, is brought into prominence, with greater emphasis and at greater length than in any previous book on logic.

It is interesting to find that Mr. Baillie agrees with other logicians with respect to the laws of thought. Some logicians hold that these are natural laws that we must observe, and from which our minds can no more escape than our bodies can escape the law of gravitation. Others hold that these are laws in the civil sense—mandates that we ought to obey, but that we can disregard if we choose to take the consequences, just as we can disregard the law for licking stamps once a week. Most logicians, among whom it seems that Mr. Baillie is to be reckoned, maintain that the laws of thought are of both kinds at once, so that we are powerless to escape from them, but can disregard them if we choose. This is the position that I find it difficult to accept, and that Mr. Baillie thinks I am so superficial in rejecting. He finds it easy to accept it, but then he is a professional logician, and no professional logician would reject a doctrine on the mere ground that it is self-contradictory. That is wherein they have such an enormous advantage over us benighted creatures who have not enjoyed the advantages of a logical training.

Mr. Baillie says, quite correctly, that I complain that logicians have always been possessed by a passion to exclude from the realm of logic as much as they possibly could; and he goes on to say that I do not see *why* they have done this. I beg his pardon, but I do see it, or think I see it, and have given in my book the reason. It is because this method is so miserably inefficient that there is only an insignificant remnant of reasonings to which it can be made to apply. "Logic in fact forestalled the methods of Christian Science. When it came upon an inconvenient fact that it knew not how to account for or to deal with, logic adopted the simple course of ignoring that fact, and pretending that it did not exist." Mr. Baillie says that the reason tradi-

tional logic ignores the "many forms of proposition and of argument, many classifications, distinctions, etc.," that I include in my system, is that these are of no scientific interest. By scientific interest I suppose he means interest to logicians of the old and now exploded school, for that they are of interest to men engaged in scientific work of various kinds, I have the best reason for knowing. The new forms are, he says, such as can be very easily made, and as one has very little interest in making. Well, if the distinctions are so easily made, how is it that logicians have always hitherto confounded the corporate individual with the collective class, both with the aggregate individual, and all three with the uniform individual? Biologists have puzzled for generations over the proper concept of an individual, and are not agreed about it yet. It was the duty of logicians to provide them with such a concept, but logicians, living as they have always done, in the moon, considered, I suppose, that the concept was very easily made, and such as they had no interest in making, so they left it alone. The forms of proposition, argument, etc., that are ignored by logic, but are included in my system, are not only very easily made and of very little interest, but they are also, says Mr. Baillie, of very inferior importance as far as the theory of logic is concerned. They may be all this, but I should doubt whether they are more easily made, less interesting, or less important than the argument that if Socrates is a man and all men are mortal, then Socrates is mortal. Any argument more easily made, less interesting, or less important than this, it would be difficult indeed to devise.

The reason, says Mr. Baillie, that logic does not make use of all the differences of modality "is of course that modal propositions are so vague that, however practically useful they may be, they can be of little theoretic interest." He must pardon me, but that depends on the scope of the theory. If the theory is as poor, as limited, as narrow, as inept, as that of traditional logic, and extends only to apodeictic or assertoric certainty, then, of course, modal propositions are of little theoretic interest—to those theorists. But if the theory covers, as mine does, every degree of certainty and doubt, then modal propositions have as much theoretic interest as apodeictic propositions, and more.

Mr. Baillie finds fault with my analysis of the proposition. I say that the proposition expresses a mental relation, and that every relation must contain three elements—two related terms, and the link that relates them. "It is surely evident," says he, "to the slightest reflection that the relation does not contain the two terms *and also* the relating link. The link is nothing apart from or outside the terms, and is nothing that can be reckoned alongside of them as a third thing. The disastrous effect of this erroneous start," etc. To this I can but reply that it is surely evident on the slightest reflection that a relation does consist of three elements, and I have demonstrated in my *Logic*, p. 142, that if any of the three elements is taken away, the relation *ipso facto* ceases to exist. Of course, if by a thing Mr. Baillie means a tangible thing, then the relation is not necessarily a thing; but then neither are the terms. If the proposition is "This law is less just than that," a relation (of inequality in justice) is established in my mind

between this law and that law. I cannot touch the relation, it is true, neither can I touch the laws. If the proposition is "This rod is longer than that," it is true that I can touch the rods and I cannot touch the relation of inequality of length; but the inequality is not less "a thing," in the sense that I attach to a "thing," that is to say, of being contemplable by the mind, than are the rods. It is true in one sense that the relation is not apart from the terms, since, of course, there can be no relation except between related things; but in another sense the relation is apart from or independent of the terms, for the relation of inequality may be transferred from the rods to the laws, and from the laws to numbers, and to many other things; so that, although the relation is nothing apart from or outside of *some* terms, yet it is quite apart from and outside of any specific pair of terms, and may exist independent of them. Moreover a similar reasoning may be applied to terms themselves. Mr. Baillie asserts by implication that terms are things, and may exist apart from the relation between them. Granted; but still the terms can no more exist apart from *some* relation than the relation can exist apart from some terms. To deny this is to deny the relativity of knowledge. If by a "thing" we mean, as I mean in this context, that which is contemplable by the mind, not in complete separation from other things, for such complete separation is incompatible with the relativity of knowledge, but with such comparative prominence as amounts for practical purposes to separation, then the relating link is as much a thing, and as separate a thing, apart from and outside the terms, as the terms are separate, apart from, and outside, the link between them.

The true logical structure of the proposition is, as Mr. Baillie rightly perceives, one of the cardinal and fundamental points on which I differ from the current doctrines of logic; and it is therefore worth while to pursue a little further his examination of my position. In the proposition "A is unequal to B" "*only one thing*," says Mr. Baillie, "is said about the subject A, *viz.*, that it is 'unequal to B.' 'Unequal to B' is *therefore* [my italics] an indivisible expression for logical purposes. The only natural division is into the subject and what is said about it." I don't know whether Mr. Baillie would claim that this argument is a syllogism, but, syllogism or not, it is a very good sample of the mode of argument adopted by logicians. Would anyone on reading this passage suppose that I had discussed at length this mode of dividing the proposition, and had given reasons for holding it a bad and unnatural mode of division? Mr. Baillie meets my reasons and arguments by the simple assertion that the mode I have examined and found faulty is the right mode. He does not argue the matter, or explain why it is right, or meet my objections. No. *Sic volo, sic jubeo; stet pro ratione voluntas*. This living instance of the method of traditional logic will go far, I think, to justify in the minds of my readers my attack on the system. If this is the mode of argument taught by traditional logic, it is surely high time traditional logic was abandoned.

"When we say 'Tom is like Harry,' we do not attribute Harry to Tom in a certain relation" [No, we don't, and who outside of Bedlam would say that we do?], "but we attribute 'likeness to Harry' to Tom." Of course if attribution is the only relation that can be conceived by minds

or expressed in propositions, as Mr. Baillie, in common with all other logicians, asserts, then in asserting "Tom is like Harry," logicians do attribute "likeness to Harry" to Tom; but as I have so often warned them in my book, they must not seek to impose on reasonable men the restrictions and limitations with which they choose to fetter themselves. No one on this earth, except a logician, would or could so interpret the proposition "Tom is like Harry." What everyone but a logician would see in the proposition is the assertion of a relation of likeness between Tom and Harry. If Mr. Baillie would look, not to what text-books of logic assert that he ought to see in the proposition, but to what the mind contemplates in constructing the thought which the proposition expresses, he would find that the mental operation is the comparison of Tom and Harry, and the discernment that they are alike. The thought is founded on Tom and Harry, and subsequently brings in the relation of likeness. The mind does not separately contemplate "Tom" and "likeness to Harry" and then attribute the one to the other. Until Tom and Harry are compared, there can be no "likeness to Harry" to attribute to Tom. "And so the relation of attribution" does *not* "naturally cover all the other relations mentioned by Dr. Mercier." It is on this analysis of the nature and course of the mental operation that I found my doctrine, that the true structure of the proposition is not "Tom—is—like Harry," but "Tom—is like—Harry." Each term is, I say, contemplated separately and alternately; the ratio between them, of likeness, is a third thing different from either of the terms, and from both of them taken together; and the two terms, linked together by this element of the ratio, together constitute a relation; and thus, I say, are all relations constituted. "If," says Mr. Baillie, "the copula is merely a sign that we are saying something about something else, surely it is general enough to include all relations." Who would suppose, on reading this sentence, that I had entered into a long and elaborate argument to show that the copula does not and cannot include all relations; that, in fact, it expresses but very few; and that even such a simple relation as "Brutus killed Cæsar" cannot be expressed by means of it?

One of the main grievances that I have against logicians is that they cannot, or do not, argue. They don't appear to recognise any difference between argument and assertion. When I have occupied many pages with a laborious and exhaustive argument to show that a certain logical position is wrong, they complacently assert that it is right, and seem to think that this assertion disposes of my arguments. Their method is the method of the little maid in "We are Seven." I laboriously argue, and prove by every method of induction and deduction and analogy, by mediate and immediate inference, and by verification of hypotheses, that two and two make four; and when I have done, and display my arguments to the logician, he says, "No, you are quite wrong; two and two make seven. Aristotle said so, and you, in disputing it, caricature his thought by interpreting it superficially. You are attacking a man of straw, a doctrine that is held by no modern logician in the crude and crystallised form in which you state it." How is one to meet such an argument as this?

Mr. Baillie's criticism of my distinction between induction and deduction is another good example of the mode of reasoning followed

by the traditional school, though whether or not it is syllogistic I cannot say. Arguing from hypotheses, which I call deduction, he calls induction, and then he says the distinction between them is *exactly the reverse* of what I say it is. Why, of course it is, if you reverse the names.

Although, however, the distinction between deduction and induction is exactly the reverse (that is, exactly the same if you change the names back again) of what I say it is, yet ultimately both induction and deduction are the same; and my distinctions, with which it appears that Mr. Baillie thoroughly agrees (after the names are changed), "leave us in chaos." This seems to me to be the familiar doctrine that nothing is new, and nothing is true, and it doesn't matter.

For one criticism of Mr. Baillie's, however, I am heartily grateful, and none the less so that he does not seem to appreciate that it gives his whole show away. My book is often, he says, a fair enough account of how ordinary men think. That is precisely what it purports to be. That is what it was written for. That is the whole and sole purpose of the book. I never intended—I should not presume—to give an account of the way in which logicians and other extraordinary men think. Their method is so amazing, and the results to which it leads are so astounding, that it is far beyond my powers of description; and no doubt it was his realisation of my limited powers in this direction that led Mr. Baillie to admit, sorrowfully, as it seems to me, that "Dr. Mercier's distinctions leave us in chaos." By "us" Mr. Baillie means, of course, himself and his fellow logicians. It is but too true. I found them in chaos, and I leave them in chaos. They are the children of darkness and eternal night. They refuse to hear the voice of the charmer, charm he never so wisely. I find them groping with their syllogistic muck-rake at Socrates and his mortality, and I bid them lift up their eyes and view the glorious crown of the New Logic; but like their prototype, they stick to their muck-rake, and prefer to go on groping in the muck.

Note in Answer to the Foregoing Reply.

The Editors have very kindly allowed me to read the MS. of Dr. Mercier's reply to my review, and have placed at my disposal as much space as I might wish to occupy in answering its charges. But I have no inclination to enter into a discussion with Dr. Mercier, my purpose having been simply to express my opinion on the value of his work. Dr. Mercier's tirade, clever as its invective undoubtedly is, is hardly of the sort that could be taken seriously in the scientific world. I am afraid he thinks more of brilliance of style than of consequence of thought. Moreover, he does not appear to have yet benefited by the rebuke administered, with such generous mildness, by Sir Thomas Clouston in a recent number of this Journal; and as no reasonable person combats incivility with argument, I should in any case have been limited in my reply to certain parts only of what Dr. Mercier has written. Dr. Mercier may call this "a conspiracy of silence"; in reality it is merely a recognition of the fact that certain things need no condemnation because they condemn themselves.

I am reproached for not having made my review longer and gone into greater detail in my criticisms. To that I can only say that I shall be very much surprised if any other student of logic thinks Dr. Mercier's book worthy of even so long a review. I may add that I am of opinion that Dr. Mercier's reply is characterised by at least as much misunderstanding and vagueness and inconsequence as was his book, and I shall perhaps give one example of each of these faults below. I do not see that I can be called upon to do more. My business as a reviewer was not to convince Dr. Mercier of his errors so much as to give the readers of this Journal some idea of the nature and value of his work.

Dr. Mercier, however, supplies my omission by choosing certain instances of his own, and he wonders whether these were among the instances which I had in my mind. I do not remember now whether they were or not, but they will serve my turn as well as any others. The only fault I have to find with them is that the explaining away of them is rather ridiculously simple. Let us select the second—Dr. Mercier's example of a valid argument from two negative premisses :

No logician agrees with my doctrines,

No logician is infallible ;

∴ Some fallible persons disagree with my doctrines.

It is surely simple enough to see that we are only able to get a conclusion from these premisses, because we are able to read the second premiss as positive, *viz.*, "all logicians are fallible." We do this by removing the two negative signs "no" and "in—" which counteract one another. It is only after we do this, and because we can do it, that we can get the term "fallible" (which occurs in the conclusion) into the premisses at all. I speak from experience when I say that any student of average ability would be able to detect this after one month's study of elementary logic. And to-day I showed Dr. Mercier's argument to a medical student who has never seen a logic-book, and, without any help or prompting, he detected and correctly stated the fallacy it contains within two and a half minutes by my watch.

Dr. Mercier thinks I reproach him for saying that a proposition expresses a *relation*. But I think I made it sufficiently clear that what I objected to was not that very obvious statement, but rather the idea that logic dealt with *verbal* relations instead of with thought-relations. If Dr. Mercier holds to this definition it would be interesting to know how he distinguishes logic from grammar or syntax. The natural distinction surely is that syntax deals with the relation of words to one another, logic with the relation of thoughts to one another. And this is usually expressed by saying that syntax deals with sentences or propositions, logic with judgments. The terminology is, of course, a mere convention, but it is adopted by most modern logicians.

One point more, and I have done. In my review I said that the true distinction between deduction and induction is the reverse of Dr. Mercier's ; that it is in deduction we are arguing from known truths, and in induction from hypotheses. Dr. Mercier now says that what I have done is merely to reverse the names. But he has been too hasty in his judgment. I took good care to determine what I meant by deduction in some other way than by reference to the characteristic which was under dispute. I said I meant a specific thing by deduction, *viz.*, the sort of argument

that is used in geometry. It is *that* sort of argument that I assert to proceed from known truths,¹ and it is *that* sort of argument that is always called deduction. Consequently, when Dr. Mercier says that deduction proceeds from hypotheses, I suppose it is of that sort of argument he is thinking. If it is not, then it is he who has departed from the usual nomenclature. If it is, then my disagreement with him amounts to far more than a mere change of names. And it should not have taxed Dr. Mercier's powers of penetration to have noticed this. But Dr. Mercier cannot hope to understand even so simple a thing as this until he has learned a more excellent way of scientific discussion. I do not know whether invective and repartee and easy sarcasm are useful instruments either in the study or in the practice of the alienist, but I am very sure that they are alike futile weapons and dangerous playthings for the serious student of logic.

JOHN BAILLIE.

Psychological Medicine : A Manual of Mental Diseases for Practitioners and Students. Second edition. By MAURICE CRAIG, M.A., M.D. Cantab., F.R.C.P.Lond. London : J. & A. Churchill, 1912. Pp. xii + 474.

We congratulate Dr. Craig on the appearance of the second edition of his *Psychological Medicine*. The first edition, which was published in 1905, has proved to be a valuable text-book for the use of students and practitioners, and has fulfilled the hopes of its author. In the present volume reference is made to the most important modern investigations and methods of treatment. The chapters on General Symptomatology, Epochal Insanities, General Paralysis of the Insane, Insanity and Physical Diseases and the Relationship of Insanity with Law are especially good; the Pathology of General Paralysis is admirably illustrated. The work exhibits evidences of careful revision throughout, and the author has aimed at meeting the requirements of examination boards in psychiatry.

Part III.—Epitome.

Progress of Psychiatry in 1911.

SPAIN.

By DR. W. COROLEU.

The Commission appointed by the County Board of Barcelona to inquire into the administration of S. Bandilius Lunatic Asylum has issued its report. The sad condition of matters therein revealed is an ample justification of the demand which the public had made for an

¹ It is a good exercise, both in elementary geometry and elementary logic, to show that "indirect proofs" do not really form an exception.

inquiry. A medical inspector has been appointed to remedy the abuses.

The Commissioners made various recommendations, one being the establishment of an observation institution suitable for clinical teaching. The carrying out of this and other recommendations has been postponed indefinitely.

Dr. Arthur Giné has published in Barcelona a *Phrenopathical Review* on the same lines as the medical newspaper which his illustrious father, Dr. John Giné, founded in 1881. Its aims appear to be similar to those of the *Spanish Phrenopathical Review* of S. Bandilius.

The *Annals of Psychiatry and Neurology*, published in Saragossa, is a praiseworthy and efficient contribution to the improvement of the study of mental science. The other journals devoted to our speciality in Spain are the Spanish *Archives of Psychiatry and Neurology* in Madrid, and the *Therapeutical Archives for Mental and Nervous Diseases* in Barcelona.

A Society of Psychiatry and Neurology was founded in 1910 on the initiative of Dr. Galcerais, the well-known specialist. Its main objects are to encourage the study of mental and nervous diseases and to suggest reforms in the laws relating to lunacy matters and in the administration of asylums. The undertaking is an arduous one, as there are not obvious signs of interest or sympathy on the part of Parliament or the administrative officials of the country. The foundation of a chair of experimental psychology in Barcelona, to which Dr. Callya, the illustrious disciple of Dr. Cajal, was appointed, was a bright day without a to-morrow, as the course of lectures was afterwards prohibited.

A similar chair in Madrid, filled by Dr. Lemarro, the eminent neurologist, was suppressed; accordingly, there does not now exist a chair devoted to the scientific study of psychology.

Dr. Timens, of Saragossa, has written a treatise on the *Diagnosis and Treatment of Insanity*. It is admirably adapted for the use of students and for general practitioners who have not time to read the larger works.

Dr. Cantarcel, a young physician, has published a work on *Psychoneurosis and its Moral Treatment*. It is mainly on the lines which Dr. Dubois follows in his work at Berne.

Dr. Xercarin has given a series of lectures on "Social Neuroses," with the object of imparting a knowledge of psychology.

Dr. Salceran has lectured on the "Causation and Treatment of Delinquency," a subject which is always interesting to the public.

Dr. Victoria, the indefatigable alienist in the Spanish Army, has been rewarded for his work by having been appointed to the chair of psychiatry in the Medical Military Training School.

The military authorities have thus taken the lead, and it is a reproach to the Public Education Department that this latter body has not provided properly for the study of psychiatry in the medical curriculum.

Epitome of Current Literature.

1. Physiological Psychology.

The Mechanism of Delusions [Über die Mechanik der Wahnbildung].
(Allgem. Zeits. f. Psychiat., Bd. xcvi, H. 3.) Niessl-Mayendorf,
Eva.

Since the investigations of Th. Meynert into the anatomy and pathology of the brain in relation to psychiatry very few discoveries in this region have been made.

It is attempted in this article to trace the mechanism of the brain which goes to form certain delusions. The conclusions arrived at can only be looked upon as hypothetical; they follow a chain of deductions based on observations of the patient's mental condition.

The patient whose case is described had developed chronic delusional insanity, unaccompanied by hallucinations. The delusions were of a sexual nature. The perceptive faculties were normal, and the memory unimpaired. The patient was able to realise all associative processes. Sight, hearing and touch were normal. The same delusions arise from time to time, and are preceded and accompanied by local sensations. It may be taken as a psychological axiom that the intensity of the delusions is *in ratio* to the intensity of these sensations. The delusions are probably due to a morbid disturbance of feeling (Gefühlsleben). This, however, cannot account for the hyperæsthesia of the organs concerned, which must arise from an abnormal functional stimulation of those centres through which the perceptions emerge into consciousness. Perhaps this stimulation itself causes lack of nourishment in a certain part of the cortex, and on account of this the remaining cortex is functionally depressed. It is not of great importance whether the cause is due to lack of nourishment or to a primary and perhaps chemical change of the cortical ganglia, or to chronic inflammation of a light nature which does not disturb the ganglionic bodies, but only influences and changes their metabolism. Or perhaps there is an inherent abnormal innervation of the arterial arborisation which increases with later changes in the vessel walls—in so far as the cortical arterial stimulative hyperæmia of each perception causes antagonistically spasms of the annular muscles and contractions, which increase of themselves, in the vicinity of the blood-vessels of the remaining cortex, and so prevents the oxidation of the remaining cortical ganglia.

Meynert, in discussing the functional opposition of the root ganglia to the cortex of the cerebrum, describes the antagonism between a pathological surplus of nutrient and functional material of the lower sensory centres and reduced cortical ability. He explains it by the special arrangement and form of the arterial arborisation for the nourishment of the blood. Thus Meynert's theory is that the root ganglia and the cortex are in functional opposition, while the author ascribes the condition to the cortical seat of the sensory disease process being in a state of regular functional antagonism to the remaining cortex.

HAMILTON MARR.

Conception during Intoxication [*Die Zeugung im Rausche und ihre Schädlichen Folgen*]. [*Zt. f. d. gesamte Neurol. u. Psychiat., Heft 1 and 2, Bd. xi, 1912.*] Näcke.

Some years ago Prof. Näcke discussed this question, and came to the conclusion that there is no reason to believe that the alleged evil effects on the offspring of conception during intoxication have ever been demonstrated. Since then the question has been discussed and investigated from various points of view, and Näcke now returns to it in order to ascertain whether there is any ground for modifying the conclusion previously reached.

The difficulties and fallacies surrounding the subject still remain. It is necessary to be reasonably certain that acute alcoholic poisoning (of which the usual but not necessary indication is intoxication) really existed at the time of coitus, that there was no other act of coitus, that both parties were hereditarily sound, and that no other temporary source of disturbance or exhaustion was present at the time. Näcke finds that among alleged cases recently reported only Holitscher's make any serious attempt to fulfil the conditions, and even these cases are too summarily reported, and leave many loopholes for doubt. Arguments based on group phenomena, without individual investigation, are obviously of no value. This is notably the case as regards Bezzola's oft-quoted statement that in Switzerland most imbeciles are conceived at popular festivals, especially those in connection with the wine industry, when drunkenness is common; it is quite clear that at such periods the unbalanced elements in the population will be specially prompted to sexual indulgence and will find special opportunity for such indulgence. Statistical associations of this kind are never decisive; they can at most present a possibility.

Difficulty and doubt, also, still surround the experimental attempts to demonstrate the action of alcohol on the generative elements. The experiments of Nicloux and Renaut, tending to show that alcohol speedily reaches the testicular fluids, are contradicted by others which indicate a special resistance of the testicle to toxic influences, and Kayserling states that there is still no evidence that alcohol can penetrate the spermatozoa themselves. Artificial fecundation in mammals with alcoholised semen has yielded very contradictory results, Ivanoff finding, indeed, that the semen is peculiarly refractory to alcohol. Féré's results with the alcoholic injection of eggs are certainly very interesting, but we do not know what bearing they have on man or other mammals.

The difficulties in the way of scientific proof are thus "colossal." We must content ourselves with probabilities in carefully investigated individual cases. It would appear that only in rare and exceptional cases is conception during intoxication attended with evil results to the offspring. Even as regards these exceptional cases we have no certainty, only a probability.

HAVELOCK ELLIS.

A Psycho-analyst's Impressions of London [*Eindrücke eines Psycho-analytikers von einem Aufenthalt in London*]. (*Imago*, 1912.)
Maeder, S.

Dr. Maeder, of Zürich, who is a distinguished adherent of the Freudian school, has been spending two months in London diligently studying the English soul, and now records his results in Prof. Freud's new journal, *Imago*. The paper may be read with profit, sometimes touched with amusement, and some of the facts recorded will be new to most Londoners. Psycho-analytically, this was to be expected.

The author seems to have been chiefly impressed by the English woman. "She is the centre around which everything revolves." She exists in two extreme types—the masculine type and the doll. The first type is most numerous, with somewhat angular and coarse features, a rather unpleasantly decided and energetic bearing, and a pronounced aggressive temperament. In general the Englishwoman feels an intense need to play the leading and ruling part; her mode of thought is very ego-centric, and her emotional disposition is egoistic. She over-dresses, wears many jewels, and always says "He loves me," never "I love him." A general impression of defective womanliness is received everywhere. Even the ballet is in England athletic. Very significant is the English ideal of beauty with its emphasis of straight lines. The Englishwoman's ideal is the undeveloped girl, and even at fifty she tries to be youthful. This insistence on the girl ideal indicates the strong sexual suppression which characterises modern England. It signifies an arrest of development at the pre-sexual stage. The fully developed woman is regarded as "disgusting"—an attitude familiar to the psycho-analyst. Flirting, again, is not regarded as a prelude to love, but as an end in itself. The picture thus presented corresponds closely to the picture of sexual repression revealed by psychological investigation of the individual.

Entirely concordant with this view is the prudery which rules in England. Maeder, who seems to have moved in puritanic circles, had daily occasion to note the close connection between religion and sexuality. Strauss's "Salome" took five years to reach London. No well-bred Englishman may use the words "hell," "devil," "adultery," or "trousers"; he may be permitted to refer to a gentlemen's "lavatory," but if for ladies it must only be a "cloak-room." Maeder was shown some preparations by a microscopist in the presence of the latter's daughter, a university graduate of twenty-eight; when the section was from a human foetus it was described in a whisper—and not shown to the daughter.

English stiffness, hyper-correctness and etiquette are also regarded as instructive symptoms, as is English self-government, which Maeder found equally notable in London streets and London asylums.

To turn from suppression to another psycho-analytic question—the compensatory channels of the suppressed libido. The chief of these are the devotion to sport and to dancing and the extravagance of *décolleté* more pronounced in London than in any other great city of Europe. Suppressed emotional expression also leads to introversion,

as shown by the pronounced self-complacency of the Englishman, both individual and national. (Many symptoms of anal eroticism are also noted in this connection, even apart from "the immense luxury of the English closet.") Suppressed libido turned in on the ego is also to be traced in the Englishman's extreme care of the person and attention to dressing. So also with English love of animals. "Domestic pets are in England the lightning-conductors of libido."

An advantageous result of the kind of suppression that prevails in England is that by placing women on a lofty pedestal and making love difficult it spurs men to great achievements, arousing ambition and the impulse to produce one's best. In Germany it is impossible, even in a dream, to imagine a social democrat becoming a cabinet minister, or a man of science like Darwin finding his grave among national heroes.

There is evidently a rich field for the psycho-analyst in London. But Maeder is careful to point out in conclusion that he does not wish to make out that the Englishman is neurotic. He regards him as a gigantically capable person who has not suffered unduly from the suppression to which he has been subjected. HAVELOCK ELLIS.

*Emotional Dream-state. (Journ. Nerv. and Ment. Dis., June, 1912.)
Powers, W. J. S.*

It is held by many that "emotional dream-state" always depends to a large extent on pre-existing conditions of the organism, and that the traumatic shock of sudden emotion will not always suffice to produce it. This is questioned by Powers, who illustrates his argument by four cases which he observed, under Ziehen, at the Psychiatric Department of the Charité Hospital in Berlin. Of these the most decisive, and, indeed, the most exceptional, is the first case.

The patient was a man, æt. 30, married, with five healthy children, robust, well-developed, normal (except for slight strabismus), good heredity, always healthy, very moderate in alcohol and tobacco, of quiet, retiring nature, not easily excited, but very energetic, a hard worker and absolutely trustworthy. He worked an electric crane in a foundry. The day before admission he was working the crane as usual when the machine suddenly stopped. He at once shut off power. Stepping back to view the machinery he saw the body of a man jammed between the crane and a beam. He screamed, and after that was unconscious of anything that happened. His foreman stated that he seemed about to leap down from his elevated position; he was brought down with some difficulty, sobbing bitterly and trembling so violently that he could scarcely walk. He lay down for an hour, weeping and muttering incoherently, and was then taken to the hospital in an ambulance. On admission he was able to walk with support, but had no ideas of place, time and persons. A fine static and motor tremor was noticed; knee reflexes symmetrically exaggerated, patellar clonus, excessive sensitiveness to the lightest prick of a pin-point. He lay quietly in bed muttering, and with spells of violent weeping, breathing slowly and deeply. Ten hours later his wife visited him, and for the first time he showed conscious interest, recognised her, and told her that he had constantly before his eyes the man's body jammed between

the crane and the beam. An hour later he was again unable to recognise his surroundings. He was transferred to the Psychiatric Department, and in the morning was able to ask questions, and except for nervous restlessness seemed normal. He was able to recall his wife's visit, but the ten hours before her visit and the twelve hours after remained permanently a blank to him. He still had always before his eyes the vision of the man's jammed body, but though advised to stay longer in hospital he insisted on returning home. In a few days he returned to work, the restlessness decreased, and the vision became less persistent and distressing. At his own wish he resumed working the crane. The condition is regarded as dream-state due to emotional shock. There was not the slightest indication of hysteria or epilepsy, and the patient had been in the habit of drinking only a pint of beer daily; the commonest predisposing causes of emotional shock were thus eliminated. Similar cases were observed by Stierlin during the earthquake at Messina. In these emotional shock resembles severe mechanical shock. In all probability the emotional dream-state is brought about by vaso-motor disturbance.

HAVELOCK ELLIS.

Two Psycho-analytic Theories [Zwei psychoanalytische Theorien]. (Zt. 1. Psychother., Bd. iv, Heft. 2, 1912.) Wexberg.

Freud's psycho-analytic doctrines are now generally known in their main outlines, and they have adherents all over the world. It was inevitable that among the Viennese master's able and vigorous disciples some should eventually develop along individual lines and reach entirely independent standpoints of their own. This process has most notably occurred in the case of Dr. Alfred Adler, the author of a recent remarkable book, *Ueber den Nervösen Charakter*, and founder, in 1911, of the Union for Free Psycho-analytic Investigation, which is preparing to issue a lengthy series of publications. This society has been formally declared to be heterodox by the Freudian Psycho-analytic Society, which forbids its members to belong to both societies.

Wexberg, who himself belongs to Adler's school, here describes the two psycho-analytic theories, with the object of bringing out clearly the distinctive character of Adler's position.

This position is, on the whole, so distinct that Adler might dispense altogether with Freud's theories, although not with his method. Adler starts with the conception of defective or inadequately developed organisms. It is on the organic basis of such *Minderwertigkeit*, he holds, that a neurosis is built up. Freud, on the other hand, may be said, on the organic side, to start with the assumption of erogenous zones with an infantile irritability. It may be, however, Wexberg suggests, that this opposition can be bridged over if we suppose that the functionally inadequate organs furnish the ground on which the irritable erogenous zones develop. But in any case this conception of organic *Minderwertigkeit* must be firmly held in mind, for it is the basis of Adler's theory. It is because the subject feels that his organically defective organ must be fortified that he is apt to lay upon it an undue emotional stress, and so constructs a fiction which may develop into a morbid state.

The first psychic reaction, according to Freud's theory, is the wish assuming a primary auto-erotic form. The auto-erotic wish is represented in Adler's theory by the emotional over-valuation which follows on the realisation of functional inadequacy. This is a process of compensation, like the hypertrophy which may follow cardiac inadequacy. It leads to an intellectual effort of assurance in which the subject seeks to support his over-valuation by proofs. He exercises foresight in assuring and protecting himself and building up defences around his weak points. But he has also a second and more aggressive line of action which Adler terms "the masculine protest"; by this he seeks to make himself felt, to become powerful, to be at top. The contrast between this over-compensation and the constantly recurring uncertainty largely determines the neurotic's part in life. Between this action and reaction arises a functional refinement of the psychic apparatus, an intellectualisation of the psychic life which experimentally works with ideas before it actually strikes into real life. In this way the neurotic creates fictions, the idea that he possesses the force he desires to possess being, indeed, itself a fiction. By the development of his fictions he achieves on the psychic side the necessary compensation. But in relation to the existing forms of society and civilisation the compensation is inadequate and the conception of disease thus empirically arises. This reaction of compensation, showing itself in protection and masculine protest, may be said to correspond to Freud's doctrine of the reaction to auto-erotism manifested in the mechanism of the suppression of impulses. The two conceptions, though they cannot be amalgamated, are parallel, dealing with the same problem from different sides. But the idea of suppression has no part in the Adlerian doctrine. Nor, it may be added, is Freud's conception of the immensely extended sphere of sexuality accepted by Adler.

Thus Freud may be said to start from a "plus" (over-erogenous organs) which needs to be compensated by a "minus" (suppression). Adler starts from a "minus" (inadequately functioning organs) which needs to be compensated by a "plus" (the tendency to protection and the masculine protest). Suppression leads to sublimation, the protective tendency to intellectual refinements, these two being the same. Freud, however, regards much in individual development as normal which Adler regards as neurotic. Freud, moreover, explains psychic processes from the emotional side, Adler from the functional side. Both methods are legitimate. Therefore, Wexberg concludes, the two theories are necessarily related to each other, though which lends itself better to therapeutic psycho-analysis experience alone can decide.

HAVELOCK ELLIS.

On the Nature of Hysteria [*Sulla natura dell' isterismo*]. (*Riv. Sper. d. Freniat.*, vol. xxxviii, Fasc. 1.) Morselli, A.

The author passes in review various theories as to the nature and origin of hysteria which have held sway in the past and have their supporters to-day. Over fifty hypotheses, arranged in nine principal groups, are exposed and criticised. Not one of them really succeeds in defining the essence of the condition. They are almost all founded

on one-sided and restricted views, and deal more with the hysterical manifestations than with the particular constitutional condition of the hysterical subject, which is the foundation upon which the symptoms are produced. The peculiar features of the hysterical personality, the reason why the malady appears in some and not in all individuals, the cause of the persistence of determined psychic states, capable of producing the most diverse phenomena, the influence of different causes in the production of hysteria are essential questions which some have not even attempted to answer. From amongst the discord of theories two points emerge with regard to which there is a fairly general agreement: the seat of the malady, and the principal disorder which would give rise to all the morbid phenomena. All the scientific theories embody the fundamental conception that hysteria is a *psychosis*, or rather a cerebrosis of the pallium and the basilar nuclei. Next, the majority of the hypotheses ascribe the cause of the morbid manifestations to particular states of the cortical, transcortical, and subcortical reflectivity. Thus, various authors speak of disturbances in the cortical or subcortical reflexes (Raymond); of paradoxical psychic reactions (Tanzi); short circuit (Jelgersma); of suspension, exaggeration, or perversion of the function of one or more cerebral centres (Tamburini, Tonnini, Ferrari); of dysrhythmia (Organski and Joire); of polygonal activity (Grasset); dissociation of the personality (Janet); hyperactivity (Crocq), etc., all of which disorders must have their seat in the grey matter of the cerebrum. The hysterical personality would be associated with this disorder and manifest itself by an altered reactivity, *i.e.*, the transformation of an image into an idea or a movement, in either a rapid and repeated, or a slow manner, a suggestibility differing from other forms of suggestibility in its tendency towards a ready translation into action, and a mentality generally infantile. The hysterical personality is a degenerate one, a *minus valor* from both a biological and a social point of view, inasmuch as it loses and does not acquire dominion over certain psychic reflexes, especially these of an inhibitory nature. To arrive at a definition of hysteria it would be necessary to separate all hysterical states which are symptomatic of other morbid forms from the group of cases, perhaps not at all numerous, in which we find the full development of those symptoms which we call hysterical, the *grande hystérie* of Charcot. Perhaps it is only to the latter that the name of hysteria will in the future remain, while all the other states will be regarded as syndromes.

J. H. MACDONALD.

2. Clinical Psychiatry.

Hallucinations of Hearing in Diseases of the Ear [*Gehörstauschungen bei Ohrenkrankungen*]. (*Allgem. Zeitschr. f. Psych.*, vol. xxvi, No. 3.) *Kleineberger, O.*

Three examples of cases of marked hallucinations of hearing are given, in each of which there was found a condition of double chronic middle-ear catarrh. In the first case there is no mention of treatment. In the other two the hallucinations were diminished by treatment of the ear disease.

It is pointed out that the peripheral condition alone does not produce

hallucinations of hearing. It is invariably accompanied by commencing arterio-sclerosis of the brain, other brain disease, or it is found in persons of a psychopathic disposition. HAMILTON MARR.

An Attack of Pain originating in the Central Nervous System, and accompanied by High Fever, in a Case of Progressive Paralysis [*Zentral bedingte Schmerzattacke mit hohem Fieber bei progressiver Paralyse*]. (*Neurol. Zentralb.*, 1912, No. 12.) Patschke, F.

The case described is one of typical general paralysis occurring in a woman, æt. 38. She was suddenly seized with an attack of severe pain affecting principally the extremities on the left side. The temperature rose rapidly while the attack lasted. The duration of the attack was comparatively short, viz., six to seven hours. There were no convulsive movements or motor paralysis. There was hypalgesia from the middle of the left femur downwards, and by piercing the skin of the calf no sensation was produced. Although the pains abated and the temperature became normal in a few hours, sensibility was not completely restored three days after the attack.

In spite of the fact that anatomical investigation was not possible, there can be no doubt that the pains were due to a disturbance originating in the central nervous system. No traces of a peripheral momentum could be discovered. HAMILTON MARR.

Anatomico-clinical Study of Presbyophrenia [*Étude anatomo-clinique de la presbyophrénie*]. (*L'Encephale*, Feb., 1912.) Marchand, L., and Nouët, H.

Three cases presenting the presbyophrenic syndrome described by Wernicke, Kalbaum, Arndt, Kraepelin and others, were made the object of particular study, clinical and *post-mortem*. Whilst some authorities regard presbyophrenia as a clinical entity, others consider it a clinical form of senile dementia, and others again as an insidious and chronic psycho-polyneuritis similar to Korsakoff's psychosis. The patients were æt. 70, 84, and 71 respectively, and each presented the symptoms which, according to Kraepelin, characterise presbyophrenia, viz., amnesia of fixation and of evocation, confabulation, disorientation and illusions of recognition. The first two patients had never been given to excesses of any kind, and the third was addicted to alcoholic excesses during several years before the commencement of his illness, and in his case alone was there any possibility of doubt as to the diagnosis between presbyophrenia and Korsakoff's psychosis. Senility and cerebral atheroma were the only ætiological factors discovered in the other two. Examination failed to reveal any indication of polyneuritis in any of the patients, and no history of former paralytic troubles was obtained. The continuity of the disorders of memory, the absurdity of the conceptions resulting from these disorders, the rapidity and facility with which the patients comprehended and responded to the questions put to them, the weakening of judgment, reasoning and affective sentiments, excluded the presence of mental confusion, and indicated a state of dementia related to diffuse and severe lesions of the cortex. Both macroscopi-

cally and microscopically the lesions found in the brains of all three cases were such as are met with in ordinary senile dementers. The histological examination of the peripheral nerves revealed no parenchymatous or interstitial changes. The authors conclude that presbyophrenia is a variety of senile dementia which is to be distinguished clinically and anatomically from amnesic mental confusion with or without polyneuritis.

J. H. MACDONALD.

Anatomical and Clinical Study of the so-called Senile Plaques [Étude anatomique et clinique des plaques dites séniles]. (L'Encéphale, Feb., 1912.) Marinesco, M. G.

In 1892 Blocq and Marinesco described the presence of little round nodules scattered throughout the cerebral cortex of an old epileptic and regarded them as islets of neuroglial sclerosis. Since then many other observers have detected such nodules, especially in senile brains. In 1906 Alzheimer described them in a patient, æt. 56, along with a particular alteration of the neuro-fibrillæ and a special degeneration of the cortical nerve-cells revealed by the method of Bielschowsky. The clinical picture differed from that of senile dementia, and there were no symptoms of a focal lesion or of any paralytic, syphilitic or arterio-sclerotic affection, and Alzheimer believed he had met with a disease that was still unrecognised (Alzheimer's disease—progressive dementia, aphasia and asymbolia.) In 1907 Fischer published the results of his examination of a large number of senile brains by the method of Bielschowsky. He found the so-called senile plaques in 12 out of 16 cases of senile dementia. They were absent in 45 cases of general paralysis, 10 cases of non-organic psychoses and in 10 normal brains. He came to the conclusion that these plaques were present in cases of so-called presbyophrenia, but absent in simple senile dementia. In a subsequent investigation of 37 cases of senile dementia he found them absent in 9 cases of simple senile dementia and present in 28 cases of presbyophrenia. In the brains of 50 paralytics, 25 mixed insane and 20 healthy people, 6 of whom were over sixty years of age, the plaques were absent. Fischer has been led to believe that the condition is a definite and special cerebral affection, which should be given a place to itself in the classification of the psychoses, and proposed the name "presbyophrenic dementia." Alzheimer regards the plaques, not as the cause of senile dementia, but as the accompaniment of senile involution of the central nervous system, and thinks there is no reason to look on the cases in question as caused by a special pathological process. Constatini examined the brain of a centenarian, who was regarded as mentally and physically sound, and died æt. 105. He found the cerebral cortex studded with senile plaques. With regard to the intimate nature of these plaques various opinions have been expressed. In the present communication Marinesco analyses the findings of other workers and gives the details of his personal investigations. He concludes that the hypothesis according to which the central nucleus of the plaque is derived from a pre-existing cell-element, neuroglial or nervous, does not hold good. Nor can it rightly be regarded as a sort of amyloid corpuscle. The theory that they are derived from nerve-fibres by a

metamorphosis, such as takes place at the end of a sectioned nerve, may possibly hold good in many cases, but not in the case of those that occur in the first layer of the cortex. In any case we have probably to deal with an organised proteid substance which has undergone a degenerative process. With regard to the other elements composing the plaques the author thinks they may represent chemical principles precipitated in the tissue of the cerebral cortex as the result of a disturbance of the colloidal equilibrium. This might be favoured by a disturbance of metabolism, which would exercise its influence in a progressive manner. If this conception be true the term "miliary sclerosis" would have to be rejected, for the neuroglial reaction observed in some cases would be secondary. Of the chemical nature of the precipitate one can only speak tentatively. It is neither crystalline nor crystalloid but is probably a lipoid substance or substances belonging to the class of mono-amino-phosphatides or amino-lipotides.

J. H. MACDONALD.

Traumatic Neuroses, with special regard to the Indemnifiable Forms [Le neurosi traumatiche con particolare riguardo alle forme indennizzabili]. (Riv. Sper. d. Fren., vol. xxxviii.) Morselli, E.

In a communication to a congress on diseases of occupation held in Torino last year Professor Morselli expressed the following conclusions. By the term "traumatic neuroses" should be understood affections of a functional nature, so-called. Those dependent on a more or less definite and demonstrable anatomical lesion are to be excluded. The traumatic neuroses in general must be differentiated from those occurring in individuals subject to compensation, especially in the labouring classes affected by social legislation. The traumatic neuroses in this sense are of a psychogenetic nature and closely analogous to the hysterical neurosis. In the injured who present the picture of the neuropsychosis there is present at most a psychological predisposition, often of a degenerative character. The diagnosis is founded on objective signs, although these, as in hysteria, are usually psychogenetic. The development, symptomatology and course of the traumatic neuroses are dominated by two psychic elements, *viz.*, suggestion (auto- and hetero-suggestion) and simulation (conscious, unconscious, voluntary, automatic and involuntary). Five principal nosological and clinical varieties of the neurosis are distinguished, though these may pass one into another or be variously combined: the traumatic neurosis of Oppenheim, which should be considered by itself; the neurasthenical, the hysterical or hysteroid, the hypochondriacal and the paranoid or querulous varieties. Simulation goes from simple parading of the somatic and psychic disturbances and their exaggeration up to complete shamming. When this is not the outcome of pre-existing dishonesty or laziness, it is the logical and natural consequence of the idea of compensation propagated amongst the labouring classes and all workers liable to compensation, and of the notions concerning the laws of compulsory insurance and civil responsibility. Nevertheless, the traumatic neurosis is rather rare even in those occupations exposed to risks of accident, and has a less practical importance amongst the diseases of occupation

than is commonly believed. The prognosis, in the absence of medical or surgical complication of another kind, is favourable in 90 to 95 *per cent.* In cases which don't recover we must suppose the existence of true anatomical lesions of the nerve-centres and especially of the vascular network (arterio-sclerosis and secondary alterations). The traumatic neurosis, pure and simple, is to be regarded as a product of a two-fold obsession, that of the damage wrought by the injury and that of the compensation promised and expected. Where the existence of pathological consequences of the injury is disputed and legal proceedings are prolonged for months and years, the clinical picture of the neurosis becomes distorted and deformed owing to the defensive needs (in a judicial sense) of the injured party. We may then speak of a true litigation-neurosis of a psychopathological nature, akin to processomania or querulantomania. The treatment is essentially moral, or rather is summed up in a wise, rapid and efficient psychotherapy. Finally, the author remarks on the need of improvement in the laws affecting labour, especially in the direction of a more expeditious process for ascertaining the amount of damage sustained and liquidating the indemnity.

J. H. MACDONALD.

Inequality of the Pupil in Affections of the Lung and Pleura [L'Inégalité pupillaire dans les affections pleur-pulmonaires]. (Le Progrès Medical, May, 1912.) *Sergent, Emile.*

We are warned not to accept the statement that inequality of the pupil is always of syphilitic origin. There are two great classes in which cases of inequality of the pupil may be placed, firstly those with, and secondly those without, an alteration of the reflex, and in the former class is included the Argyle-Robertson pupil. Again, the latter class may be subdivided into those examples due to endogenous causes, cataract, pilocarpine, congenital defect, and secondly, those due to stimulation of the motor nerves of the pupil, basal tumours, meningitis, and intra-thoracic lesions such as aneurysm, mediastinal tumour.

Inequality of the pupil may be the only apparent sign of commencing lung mischief. It has been found in 58 per cent. of people suffering from acute or chronic lung disease. Chronic apical phthisis demonstrates this phenomenon most frequently.

The inequality of the pupil may be the only outward sign. It may, however, be accompanied by contraction on the affected side, a diminution of the palpebral fissure and an apparent retraction of the globe. Another variety has in addition to these symptoms vaso-motor troubles of the ear. Lastly, you may have dilatation of the pupil accompanied by vaso-motor troubles, but without any oculo-palpebral signs.

COLIN McDOWALL.

Part IV.—Notes and News.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE Seventy-first Annual Meeting of the Association was held at the Guildhall, Gloucester, on Thursday and Friday, July 11th and 12th, 1912, under the presidency, in the early part, of Dr. William R. Dawson, and later, of Dr. James Greig Soutar.

There were present: Drs. S. H. Agar, D. M. Allman, Fletcher Beach, David Blair, J. Shaw Bolton, C. Hubert Bond, E. Dykes Bower, David Bower, John Frederick Briscoe, Robert B. Campbell, James Chambers, P. J. Cole, M. A. Collins, H. C. Corner, Sidney Coupland, W. R. Dawson, J. F. Dixon, R. Langdon Down, Thos. Drapes, J. W. Geddes, Stanley A. Gill, E. Goodall, H. E. Haynes, C. K. Hitchcock, David Hunter, Theo. B. Hyslop, E. M. Johnstone, John Keay, E. F. Kough, P. W. MacDonald, T. W. McDowall, Douglas McRae, W. F. Menzies, James Middlemass, Alfred Miller, C. S. Morrison, F. Needham, H. Hayes Newington, J. G. Porter Phillips, G. Stevens Pope, Wm. Rawes, D. McKinley Reid, R. G. Rowe, G. H. Savage, Richard Sayers, G. E. Shuttleworth, R. Percy Smith, B. B. Smith, J. G. Soutar, J. B. Spence, R. C. Stewart, R. J. Stillwell, J. D. Thomas, A. C. King Turner, F. Douglas Turner, W. T. Willis, J. Warner.

Visitors: T. S. Ellis, J. Howell, Wm. Friday, Rev. W. H. Seddon, Chas. H. Deavin.

Apologies for absence were received from: Drs. Adair, Aldridge, H. de M. Alexander, Archdall, Bazalgette, Benedikt, Bevan-Lewis, Blachford, Bowes, Bowles, Brown, Bullen, Cole, Benson Cooke, Marriott Cooke, Craig, Cribb, R. Eager, Easterbrook, Edwards, Eurich, Ewart, Fielding, Fitzgerald, Forel, Fox, French, Gilmour, Graeme-Dickson, Grove, Hewson, Higgenson, G. T. Hine, Hughes, Carlyle Johnstone, R. Jones, Kay, Leggett, Lord, MacIlraith, MacIlraith, T. C. Mackenzie, Marr, Mills, Mornington, Nolan, Oswald, Bedford Pierce, Plummer, Rayner, Revington, Ridington, Ronaldson, Steen, de Steiger, Stoddart, Tate, F. R. P. Taylor, D. G. Thomson, O. F. Treadwell, Turnbull, Watson, E. W. White, Wilkinson, Yellowlees, and Younger.

MINUTES.

The minutes of the last annual meeting, having been already printed and circulated in the Journal, were taken as read, and were duly confirmed and signed.

ELECTION OF OFFICERS, COUNCIL AND STANDING COMMITTEES.

The PRESIDENT nominated to act as Scrutineers for these elections Dr. Phillips and Dr. Rows. He announced that the number of vacancies for nominated members was six.

The ballot having been taken, the President announced that all the gentlemen whose names appeared on the agenda paper had been elected.

ELECTION OF STANDING COMMITTEES.

PARLIAMENTARY COMMITTEE.

The PRESIDENT said the names of the proposed members of this Committee were before the meeting, and any member who wished to do so might propose any modification.

Dr. GILL proposed the election of the gentlemen whose names appeared on the agenda paper. This was seconded and carried.

EDUCATIONAL COMMITTEE.

Dr. MACDONALD proposed, and Dr. HUNTER seconded the election of this Committee as it appeared on the agenda paper. This was carried.

LIBRARY COMMITTEE.

Dr. SOUTAR proposed and Dr. PERCY SMITH seconded the election of this Committee in accordance with the names printed. This was carried.

The GENERAL SECRETARY said he had to announce that the Irish Division had now elected another representative member of the Council, namely, Dr. Hetherington, to take the place of Dr. Drapes, who had become Editor of the Journal, and an *ex-officio* member of the Council.

This was confirmed.

REPORT OF THE COUNCIL.

The number of members—ordinary, honorary, and corresponding—as shown in the list of names published in the *Journal of Mental Science* for January, 1912, was 743, as compared with 730 in the corresponding number of the Journal for the previous year. The difference is accounted for by an increase of 10 in the ordinary members, 1 in the honorary members, and 2 in the corresponding members—one of whom became an honorary member.

The following shows the membership for the past decade :

Members.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.
Ordinary . . .	586	597	620	641	638	645	652	673	680	690
Honorary . . .	37	36	35	32	32	30	29	32	33	34
Corresponding . .	12	12	15	15	15	15	15	17	17	19
Total . . .	635	645	670	688	685	690	696	722	730	743

The increase is therefore 108, of whom 104 are ordinary members.

The number of new ordinary members elected and registered during the year was 47, an increase of 6 on the previous year.

Twenty-one ordinary members have resigned and 6 names were removed. Two names that had been omitted were reinstated. Three honorary and three corresponding members were elected.

The Council regrets to have to chronicle the deaths during 1911, of one honorary and eleven ordinary members; these included three past Presidents—Dr. Blandford, elected in 1857 and President in 1877, Dr. Murray Lindsay, elected in 1859, President in 1893, and Dr. Whitcombe, elected in 1872 and President in 1891—Dr. Hughlings Jackson, Physician to the Hospital for Epilepsy and Paralysis, member since 1866, and Dr. Francis Sutherland, Deputy-Commissioner in Lunacy for Scotland.

The usual quarterly meetings were held in November, February and May. That in February was held by the courtesy of Dr. C. Hubert Bond and the Visiting Committee at Long Grove Asylum, and was a record meeting, no less than 90 members and 17 visitors being present. An excellent medical programme was provided by the medical staff of the asylum, and many interesting cases were exhibited with notes. The thanks of the Association are due to Dr. Bond for his generous hospitality.

Thanks are due to Dr. Dawson and others in Dublin in connection with a very successful and enjoyable annual meeting in Dublin, when the Association was specially honoured by the presence of the Lord Lieutenant of Ireland at the annual dinner.

The attendance at all the meetings has been good, and the papers have been interesting and of a good standard.

Fourteen Divisional meetings have been held with good attendances. The membership of the divisions, as reported to the May Council meeting, was:

South-Eastern	244
Northern and Midland	146
South-Western	106
Scottish	98
Irish	62

The Medical Inspection of School Children Committee has continued to meet, and presents a report.

The Housing Committee presents a report.

The British Committee of the International Institute for the Study of the Causes of Insanity continues to meet, and presents a report.

The Parliamentary Committee has held regular meetings during the year, and a special sub-committee has been formed to follow the progress of, and do the necessary work connected with, the Government's Mental Deficiency Bill.

The Educational Committee, which has lost the services of the chairman, Dr. Mercier, owing to ill-health, and of the Secretary, Dr. Stoddart, has met regularly and has passed the final draft of the rules for the nursing examinations, two items only, the length of time allowed for the papers in the first examination and the age-limit, being held over for the consideration of the Annual Meeting to-day.

In November the President called a special meeting for consideration of the status of psychiatry in this country and the position of the assistant medical officer. A special committee was appointed to consider the "status of psychiatry as a profession in Great Britain and Ireland and the reforms necessary in the education and conditions of service of assistant medical officers," and the following resolution was sent to the Educational Committee: "That this meeting strongly urges the importance of necessary facilities being provided to assistant medical officers for obtaining the diploma in psychological medicine and other special qualifications."

Reports of the Educational and Parliamentary Committees have been printed and circulated.

Dr. Robert Jones represented the Association as a delegate at the International Congress on Psychiatry in Tunis, 1912.

The honour of knighthood has been conferred on two members of the Association by his Majesty the King, namely Sir Thomas Clouston and Sir George Savage, and the Association at its February meeting passed resolutions of congratulation.

The Journal continues to be much appreciated and the sale continues to show an increase.

The entries for the Nursing Certificate examinations during the past year have been 194 in November and 653 in May for the final, and 191 in November and 652 in May for the preliminary.

Thanks are due to the Registrar and Divisional Secretaries for the work so willingly given to the Association.

The President, Dr. Dawson, has presided over the meetings of the Association with dignity and courtesy.

Dr. C. Hubert Bond, the General Secretary, has been appointed a Commissioner in Lunacy for England and Wales and has resigned his post after filling it for nearly six years. An illuminated address has been prepared for presentation to him this afternoon.

The GENERAL SECRETARY read the report of the Council and proposed its adoption. He added that there had been a steady progress throughout the whole of the last ten years.

Dr. SOUTAR seconded, and it was adopted.

The PRESIDENT announced that a communication had been received from Professor Jules Morel, of Ghent, in which he said: "I wish the Medico-Psychological Association the best success, and very much regret not being enabled to be present at this celebrated meeting, which I hope will be followed by a long discussion upon the prophylaxis against mental degeneration." A letter had also been received from Professor Benedict, of Vienna, in which he said his state of health did not permit him to travel, but he had a great wish to renew his former acquaintanceships in the Association, and to make friends with the younger

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—For the Year 1911.

REVENUE ACCOUNT—January 1st to December 31st, 1911.

1910.	Dr.	Expenditure.	1910.	Cr.	1910.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
509 0 10	To Journal, Printing, etc.	...	...	...	46 3 6
261 9 10	" Examinations, Association Prizes, etc.	...	...	...	210 0 0
51 10 1	" Petty Disbursements, Postages, etc.	...	...	...	34 14 2
259 0 0	" Annual, General and other Meetings	...	...	...	22 1 11
50 0 0	" Rent of Premises and care of Office	...	...	...	19 17 6
6 0 0	" Audit and Clerical Assistance	...	...	...	...
108 6 0	" Miscellaneous Account	...	...	...	...
25 17 7	" Library Account	...	...	...	...
1180 10 4			1186 4 2		
161 2 9	Balance	...	280 9 8		
1341 13 1			£1466 13 10		

BALANCE-SHEET—31st December, 1911.

1910.	Liabilities.	1910.	Assets.	1910.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
0 15 8	To Journal Account, balance	...	By Lloyd's Bank:—Bankers	...
52 0 2	" Examinations Account, balance	...	" Stocks value at this date:	...
18 10 9	" Petty Disbursements Account, balance	...	" New Zealand, 31 per cent.	...
14 14 1	" Meetings Account, balance	...	Do. do. (Hack Tuke Memorial)	...
14 0 0	" Rent, etc., Account, balance	...	Victoria, 3 per cent.	...
6 6 0	" Audit, etc., Account, balance	...	Do. 31 per cent.	...
38 6 5	" Miscellaneous Account, balance	...	Manchester Corporation, 3 per cent.	...
1 8 6	" Library Account, balance	...	New South Wales, 18 per cent.	...
56 7 6	" Gaskell Fund Account, balance	...	Midland Railway Preference, 21 per cent.	...
202 9 1		148 7 4	New South Wales, 31 per cent.	...
1946 7 3	Balance:—Balance at 1st January	...	Sales Account, balance	...
161 2 9	Add: Balance of Revenue Account	...	Fees Account, balance	...
2107 10 0		2312 10 4	Subscriptions Account, balance	...
24 13 6	Deduct:	38 2 1	Examinations Account, balance	...
50 15 10	Subscriptions written off	...		...
75 9 4	Decrease in Value of Stocks	...		...
2032 0 8		2274 8 3		...
£2234 9 9		£2422 15 7		...

(Signed) H. HAYES NEWINGTON, TREASURER.
(Signed) WOODINGTON & BOLT.

R. H. STEEN,
R. PERCY SMITH, } AUDITORS.

generation in the specialty. He sent his congratulations and good wishes for success.

Dr. HAYES NEWINGTON proposed that the communications from those distinguished men be entered on the minutes.

Dr. MACDONALD seconded, and it was carried.

THE TREASURER'S REPORT.

The TREASURER (Dr. HAYES NEWINGTON) said his report was in the hands of members, and he had there the bank pass-book, which was open for inspection. He had pleasure in reporting the continued prosperity of the Association's finances, and he had received the direction of the Council to invest up to another £400 of the balance which the Association had standing to its name. He concluded by moving the adoption of the Report.

Dr. MACDONALD seconded, and it was carried.

REPORT OF THE EDITORS.

In the conduct of the Journal during the past year, the Editors have endeavoured to follow the course which the former senior Editors, who resigned in 1911, had adopted with such acceptance.

They desire to record their grateful appreciation of the active interest which Dr. Rayner and Dr. Urquhart have continued to take in the Journal.

They wish to extend a cordial welcome to Dr. Drapes, and to thank the Association for his election to the Editorial Staff.

JAMES CHAMBERS.
JOHN R. LORD.
LEWIS C. BRUCE.

Dr. CHAMBERS submitted the Editors' Report, and moved its adoption. It was duly carried.

AUDITORS' REPORT.

Dr. PERCY SMITH presented the Auditors' Report, and moved its adoption.

The Auditors beg to report that they have carefully examined the Treasurer's accounts and vouchers for receipts and expenditure for the year 1911 and find them to be perfectly correct. They note with satisfaction that the balance on the year's working of the Association amounts to £280 9s. 8d. as compared with £161 2s. 9d. for 1910. This is the largest balance ever made in one year, and is largely due to the sale of the JOURNAL and the fees received for examinations.

They regret to see that the amount due for subscriptions unpaid at the end of the year has risen again to £133 17s. 6d. and that £33 12s. had to be written off on this account.

They understand that the Treasurer's clerk receives a remuneration of £3 3s. for assisting in keeping these complicated and voluminous accounts. They consider that £5 5s. would be a more generous allowance and beg to recommend this sum.

They wish to express their unstinted admiration at the way in which the financial business of the Association is managed by the Treasurer and at the clearness with which its position is shown in the accounts as set out by him, and they trust that the Association may long continue to enjoy the services of such a valuable and efficient officer.

R. H. STEEN.
R. PERCY SMITH.

Dr. SOUTAR seconded, and it was carried.

REPORT OF THE EDUCATIONAL COMMITTEE FOR THE YEAR 1911-12.

The usual meetings of this Committee have been held during the year. The Registrar reports that 204 candidates presented themselves at the November and May examinations, and that 122 passed the Paper and 170 passed the Final *vid voce*, and 117 passed both portions of the examination. There were 813 who presented themselves for the Final examination. Of these 489 passed the Paper; 808 presented themselves for the Final *vid voce*, of whom 693 passed. The

final result of the examination was that 455 passed the whole examination and received certificates.

In July, 1911, there were five candidates for the Professional Certificate, all of whom were successful. Dr. Porter Phillips, of the Bethlem Royal Hospital, gained the Gaskell prize, and the bronze medal was gained by Dr. Graham Garnett, of Murthly.

As in former years, many disciplinary cases have been inquired into by the Committee, and recommendations made to the Council upon them.

In November there were 191 entries for the preliminary examination; 17 of these withdrew, leaving a net entry of 174; 108 of these passed. There were 201 entries for the final examination; 7 of these withdrew, leaving net entry of 194; 115 of these passed.

Application has been made from one of the superintendents in South Africa that some nurses should be allowed to write their papers in the Taal language. This matter is still under consideration.

During the year the Educational Committee had, with much regret, to accept the resignation of Dr. Mercier as Chairman of this Committee, the reason for resignation being that of ill-health. Dr. Maurice Craig was elected Chairman. The resignation of Dr. Stoddart as Secretary was also received with regret by the Committee, and Dr. Porter Phillips has been elected as the new Secretary.

(Signed) MAURICE CRAIG, *Chairman*.

J. G. PORTER PHILLIPS, *Secretary*.

Dr. PORTER PHILLIPS read this report, and moved its adoption.

Dr. MILLER seconded.

Dr. MILLER said that arising from that report there was a motion, which was originally to have been brought forward by the Chairman of the Educational Committee, who was unfortunately absent, and therefore he had been asked to deal with it. In the Association's regulations for the training and examination of candidates, No. 11 stated that every candidate for the Preliminary examination must not be less than twenty-one years of age by the date of the examination. It was also stated in the rules for the conduct of the examination that three hours were to be allowed for the paper for the Final, but only two hours for the paper for the Preliminary examination. Further on in the regulations it stated that the rules for the conduct of the Preliminary examination were similar to those for the Final, with exceptions, which exceptions, however, did not include the question of the duration of the examination. It appeared to him to be desirable that the rule relative to the age of the candidate should be deleted. He thought that if a nurse or attendant were sufficiently old to enter the service and take over the care of the insane, she was surely capable of entering for the Preliminary examination at the end of a year's service. He did not think a line should be drawn in that respect. It meant that the girl could not be qualified until she was over twenty-three years of age; yet in the medical profession he believed many were qualified at the age of twenty-one. He proposed that Rule 11 be deleted, and that sub-section G of Rule 17 for the conduct of the examination be amended, so that the time allowed for the written portion might be the same for both the Preliminary and Final examinations. He thought that the rules for the conduct of the examinations should be amended so as to coincide with those for the training and examination of candidates.

The PRESIDENT said it would be more convenient to take these two questions separately. The meeting would first consider the proposition that Rule 11 be deleted.

Dr. MACDONALD seconded.

Dr. POPE asked whether what was now proposed could be done only in general meeting. Also, had the matter been thrashed out first at the meeting of the Educational Committee?

The PRESIDENT replied in the affirmative to both questions.

Dr. MENZIES asked whether there was any age rule for the granting of the certificate; must candidates be over twenty-one years of age then?

Dr. MILLER replied that there was no regulation regarding the age of the candidates who presented themselves for the final examination.

Dr. MENZIES thought there should be a rule, even if it were only for the granting of the certificate.

Dr. POPE pointed out that the legal majority of a woman was eighteen years.

Dr. MENZIES said that at his institution nurses signed on for three years, and in the case of those under twenty-one years of age they asked the father to pay if the nurse left before the three years had expired. That course had been upheld in the county court. If the meeting wished he would put his idea as an amendment, that twenty-one should be the age at which the final certificate was given after the three years' training.

Dr. MILLER said he was willing to accept the suggestion that an age-limit should be fixed for the final examination, or for the granting of the certificate.

Dr. POPE said he thought this question should be referred back. But he would be prepared to support Dr. Miller if it had already been thrashed out in committee. He did not care to take the chance votes of those present, who might not have read the subject up.

Dr. J. B. SPENCE said the matter was thrashed out at the meeting of the Educational Committee, and it was arranged that it should be brought forward. That committee had no power of their own to decide it.

Dr. PERCY SMITH asked whether a rule of this kind could be altered without the subject of it having been notified on the agenda paper, and due notice given of it. Nobody had had an opportunity of considering the matter. There was no mention of age on the agenda paper.

Dr. MENZIES said it came under the presentation of the rules, which came up for confirmation to-day, and therefore it was germane to introduce any fresh discussion upon them.

The PRESIDENT said Dr. Menzies was quite correct. The rules were up for confirmation that day, and it would delay their publication if they were sent back again. They had already been much delayed. Dr. Menzies' point rather complicated the matter. He asked whether Dr. Miller accepted Dr. Menzies' recommendation.

Dr. POPE said he had no right to do so.

The PRESIDENT remarked that he had such a right if the meeting would grant him permission. Would Dr. Miller accept the recommendation that no candidate under twenty-one years of age should have a certificate?

Dr. SOUTAR asked whether, as a matter of convenience, it would not be better to carry this motion which had been proposed by Dr. Miller, and then submit the other? They concerned totally different questions. What Dr. Miller wanted to effect at present was to permit candidates under twenty-one years of age to present themselves for the preliminary examination. But that was very different from saying at what age the certificate might be granted.

Dr. BOWER asked that the clause might be read again.

Dr. MILLER said he would read Rule 11, relative to the training of candidates for the nursing certificate: "Every candidate for the Preliminary examination must not be less than twenty-one years of age at the date of the examination." That was the rule which he asked should be deleted, on the ground that he did not think a nurse should be disqualified from going in for an examination at the end of twelve months' service in an asylum. She must have been accepted by the Superintendent as fit to do nursing. ("Agreed.") That was a very simple proposition.

Dr. HAYES NEWINGTON asked whether it would be safe to delete that rule. Would the insertion of the word "final" before "examination" cover the point?

The PRESIDENT pointed out that Dr. Menzies would be in order to move a new rule.

Dr. MENZIES replied that he considered that the alteration of one word would have made the old rule all right.

Dr. MILLER said those rules, from No. 11 on, dealt entirely with the Preliminary examination, and the insertion of a rule relative to the Final examination would naturally be wrong. But if one went further on, where mention was made of certificates being granted, a rule could be inserted there to the effect that no certificate should be given to a nurse under twenty-one years of age.

Dr. MENZIES said he would move that. He raised the question because his inclination had been to get them at the higher age, not qualifying before they reached twenty-four years. But when the matter came before the Educational Committee he was out-voted. He was now willing to reconsider his position, and he proposed

that a rule be inserted where Dr. Miller suggested, "That the Nursing Certificate be not granted to any nurse or attendant under the age of twenty-one." It would come at about Rule 21.

Dr. KEAY seconded.

Dr. POPE asked, if this was carried, whether it would form part and parcel of the Rules.

The PRESIDENT read the words again.

Dr. BOWER asked whether it could not be moved in a form which would save re-numbering of the rules.

The PRESIDENT replied that one had been cut out already, and it meant simply a slight shifting of the numbers.

The new rule was then put and carried.

Dr. MILLER said his second point was that in the rules for the conduct of the examination for the Nursing Certificate it stated in Rule 4, "Three hours are allotted for the candidates to write their answers." It then gave instructions about not writing the name on the paper nor the name of the asylum from which the examinee came, and stated—"Three hours are allowed for this paper." Later on in the regulations it said, under heading "D," as regards the Preliminary examination, "The rules of conduct of the Preliminary examination are similar to those for the Final, with the following exceptions," which exceptions did not include any statement of a difference in the time allotted for the examination. If three hours were to be allowed, he did not see why that should not be passed and the matter settled. The rules for the conduct of the examination really contradicted one another. Under heading (a), sub-section 4, was the rule with regard to three hours being allowed, and further on, under D, special rules for the Preliminary Examination, it stated "These rules are similar to those for the Final, with exceptions," but they did not include any rules relating to the time allotted for the examinations, which they should do, if three hours were to be allowed. In answer to the President, he said he suggested it should be stated that three hours were allowed for each paper. His whole desire in raising the point was to get the regulations finally settled, and he would have liked to stipulate that no change should then be made in them for the next five years.

Dr. GILL asked whether there was anything about the subjects for examination.

The PRESIDENT replied that that was not germane to the present discussion.

Dr. GILL said it was rather ridiculous to make the time allowed for the preliminary examination the same as for the stiffer examination. He would have liked to ensure that some of the examinees should be better educated. Some seemed incapable of writing a satisfactory report, and so a kind of entrance examination in reading, writing and arithmetic might be good. If three hours were to be allowed he thought the candidates should be given something to think about.

The PRESIDENT thought that was opening up rather too large a question to be brought forward now.

The suggested alterations, with the Report, were then approved.

The PRESIDENT asked Dr. Spence to bring forward the Report of the Parliamentary Committee.

Dr. J. BEVERIDGE SPENCE said it was the duty of the Secretary to the Parliamentary Committee to bring forward the Report, but he wished him, Dr. Spence, to read the Report, and express to the meeting his regret that he was unable, for several reasons, to be present. He proposed that the report, as printed and circulated, and the report of the previous day's proceedings, be received and adopted.

Dr. MILLER seconded.

The PRESIDENT said that it would be necessary to make the needed additions to the report as circulated.

Carried.

ANNUAL REPORT OF THE PARLIAMENTARY COMMITTEE, 1911-12.

Your Committee has met four times.

It has been largely occupied by a careful analysis of the Asylums Officers (Employment, Pensions and Superannuation) Bill, and a statement of the results arrived at has been printed and circulated among members of the Association.

Three Bills on the Care and Control of the Feeble-minded, which are now before Parliament, have received attention. The Government's Bill on this subject has received special consideration, and a Select Committee has been appointed to deal with the matter, and this Committee has prepared a memorandum setting forth its views and the amendments it proposes.

Other matters under review include: The Scottish Lunacy Bill, the Additional Commissioners' Bill, Sir Charles Nicholson's Bill, and the National Insurance Act.

J. B. SPENCE, *Chairman*.

H. WOLSELEY-LEWIS, *Secretary*.

ADDITIONAL REPORT.

The Parliamentary Committee met in the Guildhall at 2 p.m. on July 10th, 1912, and a prolonged consideration was given to a report upon the Mental Deficiency Bill now before Parliament which was submitted by a Special Committee appointed to examine the details of the Bill.

It was recommended:

- (1) To substitute the Lunacy Commissioners as the authority under the Bill for the Board of Control proposed, and that provision should be made for the addition of a due proportion of fully-qualified men to the said authority.
- (2) To limit the scope of the Act to certain classes of defectives whose continued presence among the population at large is undesirable.
- (3) To prevent irritating restrictions in the case of harmless defectives.
- (4) To extend the benefits of the Act to rich as well as poor defectives.
- (5) To make it clear that persons up to sixteen years of age are not to be interfered with by registration while there is a chance of these being improved by training in schools or otherwise.
- (6) That the benefits of the Act be extended to Ireland; and
- (7) That the Sub-Committee be re-appointed further to consider the Bill and to report further.

A conversation took place with regard to the National Insurance Act, but no formal resolutions were made upon this question.

The Mental Deficiency Bill.—Dr. MIDDLEMASS asked whether the Committee had discussed the question of making representations to the Government Department in charge of this Bill as to the views of the Association. He thought it was well that those views should be put before the Government, because members felt that there were certain important modifications which should be put into the Bill.

The PRESIDENT replied that the whole Bill would come up for discussion on the following day. After that meeting the Association could make what representations it chose.

The report was carried.

LIBRARY COMMITTEE.

The Library is open daily for reading, and for the purpose of borrowing books. Books may also be borrowed by post, provided that at the time of application threepence in stamps is forwarded to defray the cost of postage. Arrangements have been made with Messrs. Lewis to enable the Association to obtain books from the lending library belonging to that firm should any desired book not be in the Association's Library.

The following work has been presented to the Library by the author:

J. Larned.—*Life and Work of William Pryor Letchworth*.

A large number of books have been bound, including a complete set of the Commissioners' Reports.

The Council has acceded to the request of the Library Committee that the book-cases at present in the Library should be provided with glass doors, and this much-needed improvement is now being proceeded with. A similar alteration is being made in the cupboards in the additional room recently acquired by the Association.

Application for books should be addressed to the Resident Librarian, Medico-Psychological Association, 11, Chandos Street, Cavendish Square, W. Other communications should be addressed to the undersigned at Northumberland House, Green Lanes, Finsbury Park, London, N.

BERNARD HART,
Hon. Secretary Library Committee.

Dr. FLETCHER BEACH, in the absence of the Secretary of this Committee, proposed the adoption of the report submitted.

This was carried.

APPOINTMENT OF AUDITOR.

The PRESIDENT pointed out that it was necessary, at the annual meeting, to appoint an auditor for the ensuing year.

Dr. MACDONALD asked whether Dr. Steen retired as a matter of course, and on the PRESIDENT replying in the affirmative, proposed Dr. Langdon Down as auditor for the ensuing year.

Dr. BLAIR seconded, and it was carried.

HOUSING COMMITTEE.

The Housing Committee begs to report that, at the invitation of the Medical Society of London and the Council, it inspected the additional accommodation suggested for the use of the Association, and reported to the May meeting of the Council that it recommended that an agreement should be concluded with the Medical Society for the use of the two rooms on the ground floor at 11, Chandos Street (one being enlarged by taking in the cloak-room), together with the use, as at present, of the large meeting room and library for general and council meetings. It understands that such an agreement has been concluded at an increased rental.

R. PERCY SMITH,
Chairman.

Dr. PERCY SMITH submitted this report, and concluded by moving its adoption. Dr. BOWER seconded.

Dr. HAYES NEWINGTON (Treasurer) said the Medical Society of London, the Association's landlords, had sent him a draft of the proposed lease. He had made some remarks on it and forwarded it to the Association's solicitor. He had not heard from that gentleman in reply, but he understood that if this gentleman approved the lease, the President, the Secretary, and himself would sign it on behalf of and with the authority of the Association.

Dr. MENZIES asked what was the duration of the lease.

Dr. NEWINGTON replied that the duration was seven years, terminable, if necessary, at three years by giving six months' notice.

The report was carried.

REPORT OF THE COMMITTEE ON THE MEDICAL INSPECTION OF SCHOOL-CHILDREN (ADOPTED BY THE ASSOCIATION AT ITS ANNUAL MEETING).

The Committee consists of Drs. G. A. Auden (Medical Superintendent to the Education Committee of the City of Birmingham), Fletcher Beach (late Medical Superintendent, Darenth Asylum), W. Bevan-Lewis (late Medical Superintendent, Wakefield Asylum), C. Hubert Bond (Commissioner in Lunacy for England, Secretary of the Committee), R. H. Bremridge (Medical Officer to the Educational Committee of the County Council of Wiltshire), Chas. Caldecott (Medical Superintendent of Earlswood Asylum), J. Carswell (Certifying Physician in Lunacy, Parish of Glasgow), James Chambers (Co-Editor of the *Journal of Mental Science*), Sir Thomas Clouston (late Physician Superintendent, Morningside, Royal Asylum, Edinburgh), J. Benson Cooke (H.M. Prison Service, Wakefield), W. R. Dawson (President of the Medico-Psychological Association, and Inspector of Lunatics in Ireland), T. Drapes (Medical Superintendent, Enniscorthy Asylum), A. G. R. Foulerton (Medical Officer of Health, East Sussex), John Macpherson (Commissioner in Lunacy for Scotland), Charles Mercier (Visitor of State Inebriate Reformatories), H. H. Newington (Ticehurst; Chairman of the Committee), F. E. Rainsford (Chapelizod, Dublin), A. Rotherham (Medical Superintendent, Darenth), James Scott (Governor, Holloway Prison), G. E. Shuttleworth (late Medical Superintendent, Royal Albert Asylum; Medical Examiner of Defective Children, Willesden), R. Percy Smith (late Medical

Superintendent of Bethlem Royal Hospital), F. R. P. Taylor (Medical Superintendent, East Sussex County Asylum; late Medical Superintendent, Darenth Asylum), A. F. Tredgold (Consulting Physician to the National Association for the Care of the Feeble-Minded), A. Warner (Medical Officer to the Leicester Education Committee).

The reference to the Committee was: "To inquire into the propriety of the Association framing and tendering to authorities advice on the search for and the definition of mental deficiency which is incompatible with the retention in elementary schools, with suggestions for the appropriate treatment of such deficiency, and to consider any other cognate matters."

The Committee has held nine meetings; in addition, a careful *précis* of the transactions of each meeting has been circulated among the members of the Committee, who were invited to make representations thereon, for consideration at the following meeting. In consequence, the various questions included in, or attached to, the reference have been fully considered.

The Committee at once recognised the fact that, as regards general principles, it was to a great extent following in the footsteps of the Royal Commission on the Feeble-Minded, and that it was dealing with subjects which were receiving current attention in other quarters. Nevertheless the Committee has endeavoured to treat independently all questions on their merits, and on these lines it has come to conclusions which support the general findings of the Commission. It has, however, endeavoured to consider details from the personal and varied experience of its members, especially with regard to the scientific recording and "following up" of the progress of mental defectives. It attaches considerable importance to the formation of a complete *dossier* of each defective; and it thinks that for the better study of a case of mental disorder, even though at the time of school mental insufficiency might not have been apparent, it should be possible to refer to its school experience.

It is of the opinion also that closer relations between medical officers of the school and the asylum will be advantageous. It is possible that a warning as to the occurrence in a parent of those forms of insanity, which by their nature and time of happening may threaten to bring about early evidence of hereditary defectiveness of mind in the offspring, may be of some service in modifying normal education where such may produce stress on a possibly deficient brain.

The Committee is strongly of opinion that, in spite of any statements to the contrary, the provision of suitable means of training for children with low intellectual power, and the elimination of means of education which are not suitable to such children, may be found to be economically helpful. Experience shows that it is almost impossible to say beforehand that any child cannot be of some service, however slight, to the community. Such an opinion can only be formed after the capacity of the child has been practically tested for some period of time, and obviously such tests cannot be applied unless there is appropriate machinery in existence. On the other hand, experience proves that under scientific regulation, such as exists at Darenth, considerable saving can be made out of the work of those who, without that work, would be troublesome drones. The Committee feels certain that it is wrong, socially and economically, to allow a large number of cases (adults and children) of mental deficiency to remain deteriorating in institutions without being afforded opportunity for practical trials.

The following recommendations and resolutions have been adopted by the Committee for presentation to the Annual Meeting:

RECOMMENDATIONS AND RESOLUTIONS.

(1) The Committee, having seen the Schedule of Medical Examination of Children for Mental Defect, which appeared as an appendix to the Annual Report for 1909 of the Chief Medical Officer of the Board of Education, begs to endorse that schedule, suggesting certain amplifications (see Appendix 1). The Committee further considers that it is most desirable that local education authorities should provide facilities for consultation in doubtful mental cases between school medical officers and recognised experts in mental disease, including the past and present medical superintendents of institutions for mental defectives.

(2) That in all cases of mentally defective persons, provision should be made for a history of each case being kept as long as the case is under official supervision, and that records of the case should be preserved for reference. The Committee further considers that the schedules of school medical inspection of every child should be preserved for future reference, in case of mental failure at a later period of life.

(3) When special provision has been made for the education of a mentally defective child under the Elementary Education (Defective and Epileptic Children) Act or otherwise, a report should be made to the local education authority or other authority providing, by an expert, for the purpose of ascertaining the results, if any, of special treatment.

(4) It is desirable that medical superintendents of county and borough asylums should be empowered to communicate with school medical officers about any cases under their care, whose children are attending elementary schools under the supervision of those officers.

(5) The Committee is of opinion that an essential feature in the solution of the mental defective problem should be that adequate arrangements be made for the continuous detention and control of mental defectives requiring such care.

(6) The Committee has no hesitation, after the inspection of Darenth, in expressing the opinion that the expense of the education and training of mentally defective persons, if properly conducted, is justified.

(7) With regard to the suggestions for the appropriate treatment of juvenile deficiency, the Committee has not been able to draw up any formal recommendation which would adequately cover such an immense field of inquiry and, at the same time, be of practical use. The mere question of relative density of population renders it impossible to formulate any single proposition. There are other factors to be considered, such as the difference in intelligence, natural habit of thought, environment and anticipation of future calling and occupation, which exists between urban and rural children, and the obvious effect of variation in the extent of deficiency in any particular class.

The Committee recognises that, after all, the principal provisions for treatment must depend on the fitness, relative or absolute, of the defective for receiving modified education or training, independently of personal care and control, or the reverse. On such a footing appropriate provision will, with any necessary modifications, probably work out in the shape either of "special classes" or of institutional life, when by reason of their defect or of the unsatisfactory condition of home surroundings the special classes do not fulfil all requirements.

With regard to the special classes, in certain cases the only chance of justice being done to mentally defective children would appear to lie in co-operation between areas which cannot afford to make provision by themselves. In a large town of 160,000 inhabitants, Mannheim, a system is adopted which is set out in Appendix 2.

With regard to the second line of treatment—the institutional—there is room for difference of opinion. But the Committee puts forward (see Appendix 3) a suggestion of a colony, which, it thinks, has much to recommend it in economy, convenience and benefit to the afflicted. It is quite recognised that all such propositions must be made subject to the details of the legislation, which is so imperatively and universally demanded; but it is confidently thought that such legislation will not contain any provisions that will be inimical to the general idea.¹

Though of course this suggestion is adaptable to the care of the feeble-minded in all classes of area, it gives chief consideration to the requirements of a rural county area. The principles must be the same everywhere; but there are differences between urban and rural areas which require different practical treatment. The comparative density of population is such a difference.

Since in certain cases continuity and permanence in supervision of mentally defectives is now admitted to be essential, the Committee has rather gone beyond the childhood limit in its ideas, believing that economy and efficiency can be secured only by considerable concentration and by avoidance of a break in that supervision.

¹ Since this Report was drafted it is found that the legislation proposed does not in any way interfere with the institution of colonies.

The Committee is of the opinion, also, that the existing institutions for idiots, such as Earlswood, the Royal Albert Asylum, etc., may be taken as types of institutions that will be required for such mental defectives as cannot be conveniently treated in colonies. Their present geographical distribution permits of the existing institutions becoming nuclei for certain districts, others being required to fill up gaps so that the whole of the Kingdom should be supplied with such accommodation.

H. HAYES NEWINGTON (*Chairman*).

C. HUBERT BOND (*Secretary*).

APPENDIX I.

Schedule of Medical Examination of Children for Mental Defect.

Note.—The object of the following schedule is to facilitate the investigation of suspected cases of mental defect. It is of a suggestive nature only, and is printed in the present form for the convenience of school medical officers making inquiries into the mental condition of feeble-minded children.

I. *Name of child, address, name of school.*

II. *Particulars of home conditions, environment, school attendance, and other factors.*

III. *Family history.*

Insanity, feeble-mindedness, alcoholism, tuberculosis, miscarriage, syphilis, epilepsy, other characteristics.

IV. *Personal history.*

Constitutional defects, injury at birth, malnutrition, rickets, diseases of childhood, commencement of teething.

Walking.

Speech, etc.

Physical state of mother, length of gestation, convulsions, accident.

V. *Physical conditions.*

(a) *General.*

Speech :—defective articulation.

Sight :—blindness, total or partial, errors of refraction.

Hearing :—(deaf-mutism, partial deafness, partial mutism).

Nose and throat :—Enlarged tonsils, adenoids, mouth-breathing.

Control of spinal reflexes and of salivation.

(b) *Stigmata.*

General retardation—Cretinoid development.

Cranium—microcephaly, hydrocephaly, asymmetry, rickets, imperfect closure of fontanelles, simple head measurement.

Hair—double and triple vortices, wiry or supple.

Face—irregularity of features.

Lower jaw—protruding or receding.

Eyes—mongoloid, presence of epicanthic fold.

Ears—size, setting, conformation, lateral sympathy, size of lobes, attachment of lobe to the cheek, supernumerary lobules.

Tongue—enlarged, furrowed, papillæ enlarged.

Teeth—irregular, absent, enlarged incisors.

Palate—arched, narrow.

Fingers—webbed, clubbed, defective in number or shape, supernumerary digits.

Limbs—Excessive length of upper limbs.

VI. *Mental Conditions.*

(a) *Reactions of Motor Mechanism.*

1. Formation of motor ideas. (Execution of simple and new movement from imitation.)

2. Storage of motor ideas. (Execution of simple familiar command by word of mouth.)

3. Power of control, initiative, purpose and concentration. Success of motor output. (Execution of familiar complex movement.)

4. Motor incompetence. Attitude in standing—Position of head, spine, knees. Gait. Position of arms, hands, fingers, in horizontal extension. General balance.
 5. Motor instability. (Habits.) Rocking of body, rubbing hands, spitting, biting nails, or licking lips.
 6. Motor disturbance. Tremors (face, hand, tongue), chorea, epilepsy, aphasia, hemiplegia.
 - (b) *Reactions resulting from sensory stimulation.*
 1. Attention—Colour, size, shape, smell.
 2. Formation of memory images.
 - (a) Recognition; objects, sounds.
 - (b) Recollection.
 3. Association of ideas.
 4. Judgment (*e.g.*, length, size, distance).
 5. Relationship (similarity, contrast, symbolism).
 6. General concepts (possession, self-protection, purpose, concentration, initiative).
 - (c) *Emotional conditions*: interest, excitement, aggression, co-operation, affection, etc. (positive or negative phases).
 - (d) *Tests of intelligence*—
 1. Description of pictures, models, objects, familiar events.
 2. Letters, words, reading (word-blindness).
 3. Counting, manipulation of simple numbers, simple money values.
 4. Writing.
 5. Manual tests.
 - (e) *Tests of will power (under the above headings).*
 - VII. *Diagnosis.*—

<ol style="list-style-type: none"> (a) Physically defective—stating defect. (b) Blind or partially blind. (c) Deaf-mute or semi-mute or semi-deaf. (d) Epileptic. (e) Merely dull or backward. (f) Mentally defective (feeble-minded). (g) Imbecile. 	}	<i>In this group the symbols "a" to "g" are intended to be correlated when necessary.</i>
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 - VIII. *Treatment recommended.*
 - (i) An ordinary public elementary school.
 - (a) Normal.
 - (b) Normal, but backward.
 - (ii) A special class for dull and backward children.
 - (iii) Special school (day or residential).

<ol style="list-style-type: none"> (a) Feeble-minded . (b) Moral defective . (c) Epileptic . 	}	With notes as to after-care, custody, and the degree and character of manual training and ordinary school teaching likely to be advisable.
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 - (iv) Unsuitable for special schools.
Imbecile, ineducable, invalid.
- NOTE.*—The above Schedule of Medical Examination was published by Sir George Newman, M.D., F.R.S.E., in his *Official Report to the Board of Education for 1909*, p. 208. The Committee have made some minor additions with the full approval of Sir George Newman.

APPENDIX 2.

The Mannheim System.

The following is a short sketch of this system, communicated by one of the Committee, Dr. Auden of Birmingham, who has studied it *in loco*.

The principal elementary schools correspond to what we should term normal schools. There are eight classes or grades, through one of which each child should pass each year between the ages of six and fourteen. Ninety *per cent.* of the children do so. For the brilliant scholars, various forms of secondary education are amply provided. If, however, at the end of a year, a child cannot satisfy the teachers that it is fit for promotion, it is relegated to another and parallel system of classes, the "coaching" or "repeaters" classes. Here during

the next year it practically repeats the work of the class in which it failed to progress. It is important to note that, whereas in the chief classes the maximum teaching of children per class is forty-five, in the repeaters class the maximum is brought down to thirty-five. If the child progresses sufficiently well he goes up a grade in this school each year. If he regains ground he is sent back to the chief classes, but will always be one year behind his class-age. The classes are divided, so as to allow of more individual attention. If, on the other hand, a child does not get on properly, it is sent to a third parallel series of classes, the "auxiliary" classes, which are held in the same buildings as the "coaching" or "repeaters" classes. These, in Dr. Auden's opinion, are in strict conformity with the special classes established in England under the Defective Children's Act of 1899. Here the teaching is more concentrated still, the staff being as one to twenty as a maximum, but as a rule there are only fifteen children in a class, which is divided further into two divisions. At this point medical research comes into play, for each child's case and history are accurately taken, and it is very carefully examined by the school medical officer for any mental or bodily defects before it is sent to these classes; in doubtful cases the child is sent back to the coaching class. There are preparatory classes attached to this division, in which, as also in the lower classes, the teaching is on the kindergarten system. All through this series of classes the training is largely manual, the children attending the ordinary manual centre with the children from the normal classes. The children are retained in this series until fourteen years of age, being carefully looked after as to food, clothing, etc., by a special committee. It is somewhat surprising, and certainly satisfactory, to read that the majority of those who pass through the auxiliary classes become self-supporting. There is yet another receptacle for defectives—the Idiot Asylum—for those who fail to come up to the standard of the last school. This is maintained by the State, and not by the Education Authority. The proportions of children in the schools are about 90 *per cent.* in the chief classes, 10 in the coaching classes and 6 in the auxiliary. It will be noted that this system allows plenty of time for the child itself to demonstrate its capacity for learning, and for the discovery and correcting, if possible, of any physical causes of retardation; it avoids the wasting of slow or damaged brain-power by vain endeavours to teach it with those of higher mental capacity, or, on the other hand, by throwing it on the rubbish heap through neglect; it obviates the waste of teachers' time and energy which depend much on having only one standard of brain to develop at one time; it concentrates teaching where it is most needed; and it is very comprehensive and thorough. The main classes are, as a rule, held in the smaller schools of the six districts into which the town is divided for administrative purposes; the repeaters and auxiliary classes are held for the most part in two large two-department district schools. There is thus no stigma attached to these children, such as is found to attach in England to those who have been transferred to the "silly" or "balmy" school, a stigma which often sticks and prevents the children from obtaining a job afterwards. At the same time the removal of the lower-grade mental defectives (as is contemplated in the 1899 Act in England, but is not strictly carried out) removes the chief objection of parents to send their children to a "special school." The cost is high, but the authority can pride itself on doing its best not only for the sound brain, but for strengthening and preserving that which is weak or damaged. The number of children receiving education in the public elementary schools in Mannheim is about 26,000. The system depends upon a careful decentralisation into complete educational districts. It has been put into practice in many large continental towns, either in part, or entirely, *e.g.*, Bale, Brussels, Copenhagen, Stockholm, Vienna, and in many large German towns.

APPENDIX 3.

When, for reasons before stated, it is found that institutional life is required the Committee thinks that the central idea should be that of a colony in one or more selected places in an area. It thinks that there should be rigid adhesion to the principle that prospect of improvement by education and training in handicraft should be the essential qualification for admission. It thinks that the machinery of a colony should not be used under any circumstances for the purpose of detention solely.

The children may be divided into the following classes :

- (1) Mentally defective who are not epileptic.
- (2) Mentally defective who are epileptic.
- (3) Epileptic children who are either not at all defective mentally as far as educational purposes are concerned, or who are merely dull or backward.

The form of education will be of three types :

- (1) Physical training.
- (2) Purely manual and industrial training.
- (3) General mental education.

The general arrangements will have to be framed to afford the education or training best suited to each class. Obviously those epileptic children who are only excluded from the normal elementary school on account of their physical disease should not lose their right to general education, which may advantageously be combined with such manual training as will facilitate their becoming useful to a certain extent in after life ; on the other hand, the lowest class can only receive strictly manual training.

The fact of epilepsy complicates the whole position, for while many epileptics are much the same as other children except for the convulsions, there is potentiality of their being or becoming defectives of an undesirable nature, while they are often morally defective, and always are a source of harm to other feeble-minded children, who frequently are mimetically impressionable.

A word may be said here about moral imbeciles, who assuredly will have to be provided for somewhere. Assuming that radical improvement in the moral direction is not to be looked for, these still have to be taught, especially in the manual form. For this reason it would appear to be right to include them as scholars in the colony, since it would possess suitable means of giving such training. At the same time as many of them are criminals or quasi-criminals, their inclusion will entail a certain amount of provision for forcible detention, which may be a drawback to the general comfort. In any case they would have to be housed by themselves. By day they could mix under rigid supervision with the other children undergoing manual training.

To provide the manual and industrial instruction there should be a comprehensive set of workshops for such trades, etc., in which the children may be reasonably expected to acquire proficiency. A laundry, and possibly a needle-room, should be attached for training the girls.

As far as possible, the training of the children should commence on the kindergarten idea, and we think that the school should be staffed as far as possible by females, since they are found to be more apt and patient than men in such work.

For the adults such provision as can be seen at Darenth would appear to be suitable and sufficient. Some of the aged defectives might have manual occupation with the children, for which Darenth also supplies a precedent. Thus they would be taken away from the more vigorous life of the adult shops. A competent craftsman should direct the work in the shops.

The adults, after being trained in the schools, may well be housed in cottages on the estate containing from ten to twenty each as may be found desirable. The houses for the men would be conducted by the training staff and their wives, while the nurses and teaching staff would take charge of the women.

The colony should be provided with sufficient land to afford training and occupation for those defectives whose condition, physical and mental, is suited to garden and farm work. Probably a larger number of defectives are capable of being usefully employed in simple outdoor work than in more technical handicrafts.

Dr. HAYES NEWINGTON proposed the reception and adoption of this report, of which further copies were distributed. The Committee had the implied consent of Sir George Newman, chief medical officer of the Board of Education, to the insertion in this report of certain minor additions suggested by it to the schedule appearing in the report of the Board of Education, 1909, drawn up to aid the proper examination by school medical officers of children for the discovery of mental defect. The schedule was before the Committee, who spent a long day over it, being very much helped by the great knowledge on the subject possessed by Dr. Shuttleworth and Dr. Fletcher Beach. After thoroughly thrashing out those points they forwarded the result to Sir George Newman, and he had been good enough to approve of them ; but that formal approval could not be obtained

in time to circulate with the Report, as sent five days ago. But that day he, the speaker, had received from the printers the amended Report, which he asked the meeting to accept in place of those circulated. In Appendix 1 of that Report would be found the points which had been attended to. The Committee had been very careful, by means of a footnote, to safeguard themselves against taking credit for the exhaustive schedule. It was due to the Board of Education medical officers, chief of whom was Sir George Newman. Only a few emendations had been suggested by the Committee, and these had been readily accepted by Sir George. The latter had now read the Committee's report, and expressed his cordial approval of it, and said he would like to meet some of the members of the Committee so as to have an opportunity of talking over the matter, and, if possible, of forwarding it. The idea was to get something which was likely to be adopted by all; something which would lead to unified and universal practice. The report was somewhat long, but it was shorter than originally drafted because the Committee was a large one, and contained men with varied lines of thought, some of which were in direct opposition to others. Therefore, by way of compromise, some material had been withdrawn. He thought he might say that, as it stood now, the report represented the general feeling of this large Committee. It was not an unimportant Committee, and the Committee had had the advantage of receiving a large amount of advice from people unconnected with asylum life who were actually dealing with the problems contained in the report. At the same time, those on the asylum side of the question had been able, he hoped, to suggest to those practical gentlemen some lines of thought which might be useful. Appendix 2 represented, in his opinion, a particularly clever idea of making a scheme of education of children applicable to both the healthy and the unhealthy. He took it that a real difficulty in England at present was that there existed no machinery which of itself actually covered the normal and the abnormal children in any given area. There were plenty of experimental schools for the abnormal, but he did not think there was anything like a very specific relation between the normal educational school and the schools for special classes of the abnormal. The design set out in this schedule of the report was as follows: The normal children were all promoted in regular order by age, and those who failed to come up to the age standard were shunted or side-tracked on to a parallel line of schools. And if they could not keep pace with what they ought to do in that second school, they were relegated to yet a third. If they could not get on in the third they were sent to the idiot asylum, and doubtless that was the best thing to do for them. In this procedure was a systematic means of dealing with the whole of the childhood of a neighbourhood together. And, speaking only for himself, he did think that was the great point in reference to this matter, for it embraced the whole lot. And if the teachers of the apparently normal child were not satisfied with his progress, they had ready at hand, without applying to any other authority, a further set of schools to test the child. If the child failed under the test he was put into the proper place for him. With regard to Appendix 3 which concerned a scheme for a colony, he believed the majority of this Committee thought that a colony would be the best form for those children who, being abnormal, could not have the advantage derivable from the first step in the treatment of abnormal children, *i.e.*, by special classes. It was, of course, understood that there were some children so little removed from their normal colleagues that they required but little extra and special teaching. But when one got further away from the normal it became necessary to segregate these children, not only as far as teaching was concerned, but also for custodial care. When that point was reached the Committee thought something in the way of a colony would be very advantageous. There were, in England, many admirable institutions which it was scarcely necessary to name, doing an enormous amount of work, but the Bill dealing with mental deficiency would cover a much larger field than that represented by these institutions. It would more or less bring into view the whole of mental deficiency cases in the village, in the town, and all classes. The Committee thought that a colony, in the sense in which they put it, *i.e.*, an institution with varying opportunities, planted out in a good place, would be of the greatest service. After all, the land was the plane on which man began to work, and it was the plane to which man must return, more or less, when his brain weakened. The Committee thought that if there were plenty of scope and space on land for children and adults to work, a considerable amount of good to

them would naturally follow, and the best return, such as it was, would be extracted from their labour. Members knew what had been done in similar places, and, therefore, with some confidence, the Committee wished to impress on the general body of the Association the value of such colonies.

Dr. SHUTTLEWORTH said he was very glad to second the adoption of this report, inasmuch as it gave him the opportunity of drawing attention to the debt of gratitude the Association was under to the Treasurer, Dr. Hayes Newington, who, not content with his many other activities in the Association, had originated this scheme, and had worked with very great assiduity, industry and tactfulness, in bringing the report to the issue. As Dr. Newington had already said, there were many divergent views represented on the Committee, and, unfortunately, all the members of it could not meet simultaneously. But all the members of the Committee had a *précis* of each committee meeting sent to them, and, if they had not been present, they were requested to add their remarks. It would be readily understood that such a large committee very much complicated the labours of the Chairman, and that gentleman had shown remarkable skill and tact in drawing up this very intelligible and valuable report. With regard to the matters in it, the Chairman had already commented on them, and he did not think it was necessary to add any remarks of his own, except to express the hope that this effort on behalf of the Medico-Psychological Association to show its sympathy with what was going forward in an experimental way throughout the country with regard to the education of abnormal children would bear fruit in the direction of establishing an improved system in the future.

The PRESIDENT pointed out that the gist of the report would be found on page 2, and possibly some of the points mentioned there would invite discussion.

Dr. MACDONALD asked what was meant in Appendix 3, by the words—"When, for reasons before stated, it is found that institutional life is required, the Committee thinks that the central idea should be that of a colony in one or more selected places in an area." He wondered whether it meant that different authorities should combine, or that each county should be one central authority by itself. The question had come up for consideration in his part of the country, and the present idea was that the whole matter should come under, not only the control, but also the supervision of the county council. To take Dorsetshire as a typical case, it had an estate of 400 acres, and surely the natural thing would be for the county to be the authority, as there were no boroughs large enough to become themselves authorities. The idea would be that this central authority, the county council, should, instead of going out to buy land elsewhere, develop on the same estate. He maintained that the dovetailing which would take place within a convenient radius of these defective people and the central institution would often be of the greatest value. At any rate, he wished to express strongly his opinion that the idea of starting another authority, with its different set of officers, etc., was not to be recommended.

Dr. MENZIES suggested that the Association should let sleeping dogs lie; he deprecated saying at present anything about the point raised by Dr. Macdonald.

Dr. HAYES NEWINGTON, answering Dr. Macdonald, said that gentleman's views were his own. The appendix, in its original form, went much further than as it stood now, and in the direction pointed out by Dr. Macdonald. It was the idea originally that the colonies should not be of the asylum, but if it were possible to get them quite near it would be better. But he feared that the idea was not so universally accepted as was hoped, and part of the colony scheme had to be withdrawn. That was one way in which compromise had not, he thought, tended to strengthen the report. He very soon discovered, not only in this Committee, but in his local government world, that there was a tremendous point at issue beneath the surface of this question. Members of the Association, as lunacy authorities, naturally felt that they were the best people to deal with all forms of mental deficiency, right to the end. But that was not the view of the general population, who entertained a suspicion of the lunacy expert, and they went further, and would like to see a greater divorce between administration from the financial point of view, and the local government point of view, a divorce between that and the lunacy department. He thought that would be found to run the whole way through the Bill on mental deficiency, and through everything connected with it. It seemed likely that there would always be a fight between

the lunacy authority and the lay authority. He hoped that sooner or later, and certainly by the help of the efforts of the Association, the lunacy element would be able to hold its own, and that they would be able to show that, after all, the people who saw the more developed phases of lunacy were still broad-minded enough to take proper consideration of the cases of milder degrees of defect. That was the attitude which had got to be faced in connection with the Mental Deficiency Bill, and it led the Association to support the Commissioners in Lunacy being appointed as the controlling Board under that Act, rather than a lay authority, from whom less efficient guidance could be expected.

Dr. DOUGLAS TURNER said that on behalf of the idiot institutions under the Act he strongly supported the plea that they should continue under the Lunacy Commissioners. If the idiot institutions were certified in or under this new Mental Deficiency Bill they would come under the new authority, and there would be dual control, which would cause much friction in the actual work: he spoke on behalf of charitable institutions registered under the Act. They were keen upon keeping under the control of the Lunacy Commissioners, and supported, in every possible way, the idea that the institutions which would come under the new Bill should be also under the Lunacy Commissioners, or some body of which those Commissioners formed a part. No doubt everyone was aware that in the new Bill there was a clause suggesting future amalgamation of that department with the Lunacy Commissioners. Probably that was only for the purpose of keeping people quiet; he did not think there was any real intention that it should be acted on, because he believed he was right in saying that the Lunacy Bill of 1890 suggested a similar amalgamation between the Lunacy Commissioners and the Masters in Lunacy.

The PRESIDENT pointed out that this subject would be more fully discussed on the next day. He therefore put it to the meeting that the report be adopted.

Carried unanimously.

Dr. HAYES NEWINGTON said probably the Secretary would require some information as to what was to be done with the report. A hope had been expressed that it might be sent to various authorities, and he thought the meeting might instruct the Secretary to send it to the Board of Education and the *British Medical Journal*.

Dr. PERCY SMITH thought they should include those who had charge of the Mental Deficiency Bill in the House.

Dr. SHUTTLEWORTH said he would like to suggest that it be sent to county councils and education authorities throughout the country.

Dr. MIDDLEMASS said he would add borough councils.

Dr. MILLER said it should be addressed to the education authorities on those councils, as otherwise it might not reach them.

Dr. SHUTTLEWORTH would get over that difficulty by sending it to both.

Dr. PERCY SMITH thought it should be headed "Adopted by the Association at its annual meeting."

Dr. SHUTTLEWORTH assumed that the school medical officers throughout the country would be included.

The PRESIDENT said he supposed the meeting would empower the Chairman of the Committee to consult with the Secretary and say to whom it should be sent.

Dr. GILL said it should be sent to boards of guardians. He was himself a guardian, and those bodies were taking a keen interest in the matter. It was so in his district, where such children as the Bill aimed at had come under their knowledge. He proposed that it be sent to the clerks to boards of guardians.

Dr. POPE seconded Dr. Gill's proposition.

Dr. BEVERIDGE SPENCE said he did not rise for the purpose of supporting that proposition; he felt that clerks to boards of guardians would be found to be great opponents of the lunacy view of the question which Dr. Hayes Newington expressed. In his own part of the country boards of guardians were themselves establishing colonies. One large union had spent about £25,000 on the acquisition of a site for a colony, not alone for the children referred to in the Bill, but for imbeciles in the workhouse and non-certified patients. On the borders of Birmingham they had already established a home for children, and they reported that it was extremely successful in its results, and had the great advantage over anything which came under the county council, namely, that it was very much

cheaper. That feature would doubtless be expressed strongly, namely, that under boards of guardians they would be able to provide for the cases much more cheaply than the county councils had been able to run their asylums. At all events, the boards of guardians pressed that point emphatically on the public at present, but he did not agree with them. Still, it must be recognised that members of boards of guardians were people with whom the Association would have to deal, and their point of view would have to be taken very fully into consideration. Personally, he would rather that the memorandum should not be sent to boards of guardians, though he would not wish to ignore their influence.

Dr. GILL's proposition was then put, and lost.

INTERNATIONAL COMMISSION FOR THE STUDY OF THE CAUSES AND THE PREVENTION OF INSANITY.

British Committee.

Dr. PERCY SMITH apologised for the omission of notice of this Committee's report from the agenda paper. It was on the agenda of last year's annual meeting. He then read the report, which was signed by Dr. MacDonald and himself.

During the past year the executive (Central Bureau) of the International Commission has made but little progress in the direction of establishing the work of the national committees on a definite basis, and in consequence the British Committee has been obliged to mark time and await developments. From the outset it has been recognised by all concerned that the foundation of an International Institute for the Study of the Causes and the Prophylaxis of Insanity, however desirable and worthy that may be, must be attended by considerable difficulty. Nevertheless, so little real progress has been achieved by the International Commission during the six years that have elapsed since its constitution, that it has come to be a question, at any rate with the British Committee, as to whether or not the scheme offers a reasonable prospect of ultimate success. Briefly, there have been two serious obstacles to contend with. First, and most important, is the financial difficulty. Appeals made to the Governments of the various countries represented in the Commission for grants-in-aid have proved unsuccessful. No Government has yet contributed towards the funds of the International Commission, with the single exception of the Italian Government, which, at the inception of the scheme, gave a small grant towards defraying initial expenses. During the past year three psychiatric societies have each subscribed 100 fr., viz. the Medico-Psychological Association of Great Britain and Ireland, the Società Freniatria Italiana, and the Verein für Psychiatrie of Vienna. These sums have merely sufficed to cover the necessary expenditure by the Central Bureau.

The second difficulty the Commission has had to face has been the formulation of a definite programme of subjects which might form the immediate objects of study and inquiry in the separate countries, and at the same time permit of fruitful co-ordination by the Central Bureau. At the meeting of the Commission held in Berlin in October, 1910, it was agreed that Professors Alt and Wagner von Jauregg should be entrusted with the task of drawing up a programme of work to be submitted to the Bureau, and then to the respective national committees for approval. For some unexplained reason the German representatives have not yet fulfilled their task.

On April 15th of this year a meeting of the Central Bureau was held in Rome to consider the position of affairs, and to arrange (a) the date for the next general Conference of the International Commission; (b) subjects for treatment in the Conference and the nomination of reporters. There were present for Italy, Drs. Tamburini (President) and Ferrari (Secretary); for Great Britain and Ireland, Dr. Percy Smith; for France, Dr. Marie, of Villejuif; for Holland, Dr. Van Deventer, of Amsterdam; for Russia, Dr. Bajenoff, of Moscow.

It was agreed to hold a general conference of the Commission coincidently with the next International Congress for the Care of the Insane, which, it is expected, will take place at Moscow, either in December, 1912, or April, 1913.

The following subjects were proposed for discussion at the Conference:

(a) Unification of the terminology of the mental affections. (Reporters, Tamburini, Van Deventer.)

(b) Alcoholic and syphilitic heredity. (Reporters, Frank, Alt, or Bleuler).

(c) Ethnic psycho-pathology: statistical and general inquiry. (Reporters, Ferrari and Marie.)

PROF. TAMBURINI announced the offer of two prizes, one in the name of the Duc Decazes, and the other in the name of an unknown person by Dr. Morel, of Ghent, for original communications on subjects proposed by the International Commission. The themes chosen for this year are: "The Ætiology and Prophylaxis of General Paralysis," and "The Organisation of the Services opened for the Insane outside of Asylums."

A meeting of the British National Committee was held in London on May 20th last. It was resolved to continue our association with the International Commission, and to await the result of the proposed Conference at Moscow.

Of the £5 voted by the Medico-Psychological Association of Great Britain and Ireland, the sum of £4 was transmitted to the Central Bureau, £1 being retained to defray expenses incurred by the British Committee.

Copies of the Annual Reports of the Commissioners of Lunacy of the three kingdoms were sent from the British Government to the Central Bureau of the International Commission.

The British Committee consists at present of the following members:

Baskin, Joseph Longheed, L.R.C.P.&S.Edin., late Medical Superintendent, Fisherton House, Salisbury.

Bond, C. Hubert, D.Sc., M.D., H.M. Commissioner in Lunacy, London.

Bullen, F. St John, M.R.C.S.Eng., 12, Pembroke Road, Clifton, Bristol.

Dawson, William Richard, B.A., M.D., F.R.C.P., H.M. Inspector of Lunatic Asylums, Dublin.

Easterbrook, Charles C., M.A., M.D., F.R.C.P., Medical Superintendent, Crichton Royal Institution, Dumfries.

Goodall, Edwin, M.D., F.R.C.P., Medical Superintendent, City Asylum, Cardiff.

Hyslop, Theo. B., M.D., late Resident Physician, Bethlem Royal Hospital, London, S.E.

Jones, Robert, M.D., F.R.C.P., F.R.C.S., Medical Superintendent, London County Asylum, Claybury, Essex.

Legge, Richard John, M.D., Medical Superintendent, Derby County Asylum, Mickleover.

Marr, Hamilton Clelland, M.D., F.F.P.S., H.M. Commissioner in Lunacy, Edinburgh.

Mercier, Charles, M.D., F.R.C.P., F.R.C.S., Moorcroft, Parkstone, Dorset.

Mott, Frederick Walker, M.D., F.R.C.P., F.R.S., Director of the Pathological Laboratory, London County Asylum, Claybury, Essex, and Pathologist to the London County Asylums.

Nolan, Michael, L.R.C.P.&S.Ireland, Medical Superintendent, District Asylum, Downpatrick, Ireland.

Rawes, William, M.D., F.R.C.S., Medical Superintendent, St. Luke's Hospital, London, E.C.

Robertson, William Ford, M.D., Pathologist to the Scottish Asylums, 10, Morningside Terrace, Edinburgh.

Robertson, Geo. M., M.B., F.R.C.P., Medical Superintendent, Royal Asylum, Morningside, Edinburgh.

Rows, Richard Gundry, M.D., Pathologist, County Asylum, Lancaster.

(The above were nominated by the Medico-Psychological Association.)

Macpherson, Dr. John, H.M. Commissioner in Lunacy, Edinburgh.

Donkin, Sir Horatio Bryan, London.

(Both these members were co-opted.)

Smith, Dr. R. Percy, 36, Queen Anne Street, London, W.: Chairman.

MacDonald, Dr. J. H., Govan District Asylum, Hawkhead, Paisley: Secretary.

R. PERCY SMITH (*Chairman*).

J. H. MACDONALD (*Secretary*).

He moved that the report be entered on the minutes, also that for this year the Association should, if it could see its way, subscribe 100 francs again. He did not see much prospect of the Commission doing much good, and if nothing more definite should have happened in the next twelve months than had occurred recently, probably the British Committee would not go on with the work. This

had already been more or less intimated. He told Professor Tamburini, at Rome, that the British Committee were becoming uneasy at the small amount of progress.

Dr. MACDONALD seconded.

The report was carried.

Dr. POPE said he did not see why 100 francs should be voted.

Dr. PERCY SMITH replied that he recommended it for this year, as there were expenses, such as printing and postage, covering six years.

Dr. BOWER seconded the recommendation, and it was carried.

The PRESIDENT said there were no other motions involving the expenditure of funds. He added that there seemed to be some doubt as to what had been done by the Association with reference to the rules for the Nursing Examination. His opinion was that they had passed them in adopting the Report, subject to the modifications which had been mentioned, but so that no doubt might remain he proposed that the rules, as printed, subject to the modifications agreed upon, be adopted and become the Rules of the Association.

Dr. HAYES NEWINGTON seconded.

The resolution was put and carried.

FIXING DATES OF ANNUAL, QUARTERLY AND DIVISIONAL MEETINGS.

Mr. MACDONALD proposed, and Dr. McDOWALL seconded, that the dates as printed on the agenda paper be adopted.

Agreed.

QUARTERLY MEETINGS.

Tuesday, November 26th, 1912; Thursday, February 20th, 1913; Tuesday, May 27th, 1913.

South-Eastern Division.—Tuesday, October 1st, 1912, at Brentwood Asylum; Tuesday, April 29th, 1913.

South-Western Division.—Thursday, October 24th, 1912; Friday, April 18th, 1913.

Northern and Midland Division.—Thursday, October 24th, 1912, at Bracebridge Asylum, Lincoln; Thursday, April 24th, 1913, at the County Asylum, Lancaster.

Scottish Division.—Friday, November 15th, 1912; Friday, March 21st, 1913.

Irish Division.—Thursday, November 7th, 1912; Thursday, April 17th, 1913; Thursday, July 3rd, 1913.

ELECTION OF ORDINARY MEMBERS.

The PRESIDENT appointed Dr. Rows and Dr. Phillips to act as scrutineers for the election of the following gentlemen as ordinary members:

Hudson, William Davies, M.B., Ch.B.Liverpool, D.P.H.Liverpool, Deputy Medical Officer, H.M. Prison, Brixton, 7, Clovelly Gardens, Upper Tulse Hill, S.W.

Greeson, Clarence Edward, M.B., Ch.B.Aber., Assistant Medical Officer, Barnwood House, Gloucester.

These gentlemen were duly elected.

ELECTION OF DR. CONSIDINE AND DR. MAUDSLEY AS HONORARY MEMBERS.

The PRESIDENT proposed Dr. Considine, his colleague on the Irish Lunacy Commission, as an honorary member of the Association. That gentleman's predecessor had been an honorary member, and it was usual for Commissioners in Lunacy to be elected Honorary Members of the Association. He had much pleasure in proposing his name.

Dr. HAYES NEWINGTON proposed the name of Dr. Henry Maudsley as an honorary member, and would like to say a word in support of it, though that was perhaps hardly necessary. One need not describe Dr. Maudsley's qualifications for the receipt of this honour. There was nobody more worthy of it, and no one would be accorded the honour more readily. He thought it would be well that, in order especially to mark the occasion, the nomination should receive the strongest

possible support, namely, that of every living ex-president and every officer of the Association. He was pleased to say that everybody concerned fell in with the idea at once, and the resulting list of names was one of which anybody might well feel proud to have behind his form of proposal. Such strength of nomination was not obtained because it was thought it would be required, but simply in order to enhance the honour which it was sought to confer.

The names of these gentlemen were then separately ballotted for, and they were both unanimously elected.

The PRESIDENT said that the Secretary had handed him a letter from Dr. Shaw Bolton which was interesting as it marked a historic mile-stone in the Association. It gave the names of two candidates who had obtained the Diploma in Psychological Medicine of Leeds University, and Dr. Bolton thought that these were the first two diplomates in psychological medicine.

Dr. Rows mentioned that in Manchester there were two who had taken the first part of the special examination in psychiatry. It was a two-year curriculum in Manchester, and two candidates were now going through the course for the second year.

Dr. PERCY SMITH said that, although it was not the same thing, a certain number of people had taken the M.D. London in psychological medicine for some years.

AFTERNOON MEETING.

PRESENTATION TO DR. HUBERT BOND.

The PRESIDENT said that before singing his "swan song" there was one other duty, and that an extremely pleasant one, which he had to perform, namely, the presentation of a Certificate to the late Honorary General Secretary of the Association, Dr. Hubert Bond. There was no need for him to tell that gathering about the energy, the capacity and the method in work which had been shown by Dr. Bond during his six years of office as Secretary. All members knew that Dr. Bond had been called to a "higher place," and although, in some respects, they were sorry for it, and grudged him very much to the Board of Lunacy Commissioners, they still felt that the Association's loss had been the gain of others, and tended to what all strove for—the greatest good of the greatest number. He would not detain the meeting longer, but would ask the General Secretary to read the Address.

Dr. M. A. COLLINS read the terms of the Address, as follows: "From the President, Council and Members of the Medico-Psychological Association of Great Britain and Ireland, to Dr. Charles Hubert Bond, M.D., D.Sc., M.R.C.P., Commissioner in Lunacy. The Council and Members desire to place on record their recognition of the able and energetic manner in which you have carried out the onerous duties of Honorary General Secretary for a period of six years, from 1906 to 1912, during which time, owing to the rapid increase in membership and the scope of the Association's activities, the work has greatly increased."

The PRESIDENT then asked Dr. Bond's acceptance of the Testimonial, amid a warm acclaim from the meeting.

Dr. BOND, in reply, said: The friendly thought which prompted this address, the kindly terms in which it is couched, and the all too generous words with which you, Sir, have conveyed it, have touched me very deeply, and I would that I could adequately express my thanks. My difficulty arises from the fact that I am conscious that to have given one's best endeavours to fulfil the duties of an official post, even though it be an honorary one—and that is all I can claim to have done—does not by itself entitle one to expect, or perhaps even receive, any such recognition. Hence, when I first had wind of this mark of your favour I was not only taken by surprise, but, for a moment, filled with dismay. However, I took comfort when I reflected that, in the absence of any particular merit in the recipient, feelings of goodwill and friendship towards him might sufficiently account for such a presentation. I would take this opportunity of saying how deeply I always valued the post which, by your yearly suffrage, I held for over five years. Thanks to the energy of my predecessors I found the work admirably organised, and through it and the counsel, always available, from the other officers, notably

our revered Treasurer, I found myself able to extend my experience of business methods. But the advantage I most prized was the fact that my duties brought me in touch with so many of my *confrères*, and enabled me to make many valued friendships. In accepting this very beautiful Address, which I shall always treasure, it is my earnest hope that I shall ever retain those friendships, and that I may count on your co-operation in my new duties, of which I see kindly mention has been made in the Address. At the same time I should like to wish my former colleague, Dr. Collins, as pleasant a term of office as I enjoyed.

THANKS TO THE RETIRING PRESIDENT.

Dr. McDOWALL said it was with much pleasure he accepted the honour of proposing a vote of thanks to the out-going President and the other members of Council who had done such valuable service during the past year. The work of the Association had greatly increased, and there were activities within it at the present time which, in former years, its officers never dreamed of. It was now felt that to be an official of the Association meant the making of many sacrifices of a personal nature. And the men who were kind enough to do these things were certainly entitled to the warmest gratitude of the members. In saying good-bye and thanks to the outgoing president, he would like to remark on the very kindly and pleasant way in which he had performed all his duties, and with what great success he had looked after the Association's affairs. He hoped the meeting would accord to the President and the retiring members of Council its warmest acknowledgments for their services.

Dr. PERCY SMITH, in seconding, said he would like to endorse everything which had been said by Dr. McDowall. He felt that the Association had been greatly honoured in having had in succession two Commissioners in Lunacy—one from Scotland and now one from Ireland—as Presidents. The Association would scarcely know itself when it reverted to the original course.

The vote was carried by acclamation.

The PRESIDENT (Dr. DAWSON) said it was with great regret that he rose to make his last speech from that chair. But, in the first place, that regret was greatly mitigated by the very kindly terms in which the vote of thanks had been proposed, seconded and received. He had to return thanks not only for himself, but for the officers of the Association, and there was no need for him to go through them by name, because members knew them all, and how hard they had worked for the Association, what benefits they had conferred, and the obligations which members were under to them. Reference had just been made to the loss which the Association had sustained in the retirement of their late Secretary, Dr. Bond, owing to his elevation, but he would like to say that those who had had experience of Dr. Bond's successor during the short period in which he had held office were absolutely confident that Dr. Bond's mantle had fallen on entirely worthy shoulders. As regarded the Treasurer, Dr. Hayes Newington, even less than any other officer did he require any words spoken of him. In his presence one could not say all that one would like to as to what they thought of him; but as many of those present were aware, it was hoped next year—which would be the fortieth year of Dr. Newington's connection with the Association—to mark their sense of obligation in a worthy and permanent form. (Applause.) He therefore returned thanks to the meeting on behalf of the officers of the Association. Then one came to that very uninteresting subject—himself. He had had an extremely pleasant year of office, in which, he was glad to say, there had been no single incident in the way of friction or want of harmony to mar the entire course of it. And for that he had to thank not only the members of the Association, but more especially the officers, who had supported and helped him in every possible way. He felt, accordingly, that he was under a debt of gratitude to them and to the members generally which would not be easily repaid. The course of that year had been marked by the commencement of a movement which might have very far-reaching possibilities, and he felt proud to have helped, although it might have been only in a small way, at the start of so promising a project as that for the establishment of psychiatric clinics and the improvement of the training and conditions of service of the assistant medical officers in the three kingdoms. He hoped that would go far, and if, in the future, any offices of his could aid it, they were at the disposal of the Asso-

ciation. As it had not come forward previously in the proceedings, he might now mention another incident of the year, namely, that at the bi-centenary celebration of the foundation of the Medical School of Trinity College, Dublin, he had been invited as President to represent the Association, while Sir George Savage was asked to represent the specialty at large. Sir George Savage was also the recipient of the Honorary Fellowship of the Royal Academy of Medicine in Ireland (Applause), and when he told the meeting that among the Honorary Fellows had been such men as Virchow, Pasteur and Lister, they would understand that the honour was not quite an empty one. Now as to his successor, here, again, there was no real need to say anything. All knew Dr. Soutar, and if anything could lessen his regret at relinquishing office, it was being succeeded by such an able man and such a thoroughly good fellow as Dr. Soutar. He had much pleasure in inducting him with the insignia of office, and he asked him to accept, for the Association, the suspender which he had provided with a view to mitigating the severity of design of the badge, which, as they would remember, had been presented by Dr. Ernest White in 1904. He might say that the design of the suspender had been worked out by his friend, Mr. Caulfield Orpen, a well-known Dublin architect. He had great pleasure in welcoming to the Presidential chair Dr. Soutar, and could only wish him as agreeable a year of office as he himself had enjoyed.

Dr. SOUTAR then took the chair.

Dr. SOUTAR (President) remarked that all he need say at present was that he appreciated very highly the honour of the Presidency of the Association, and the words which Dr. Dawson had spoken in inducting him. He recognised that attached to the call was responsibility. With the kindly help and encouragement which members always gave to their President, he would do his best to struggle through. Dr. Dawson said he had added something to the official badge, and it was a beautiful addition. It showed a combination of the emblems of the three countries which members hoped and believed would, in that specialty, be most strongly and strenuously maintained.

THE GASKELL PRIZE AND THE BRONZE MEDAL.

The PRESIDENT announced, in regard to these awards, that there had been certain difficulties, which had not yet been adjusted, and, with the sanction of the meeting, the final adjudication would be postponed until the next general meeting. This was approved.

PRESIDENTIAL ADDRESS.

The President then delivered his Address.

Sir GEORGE SAVAGE said he had no idea until he caught the eye of the ex-President that he would be expected to say anything on the present occasion. One felt that Dr. Soutar had delivered the sort of address one expected. He was a man of intense practical utility, with a keen interest in the scientific advances which were being made, and possessed of fine literary taste. It was just forty years since he himself became Assistant Medical Officer at Bethlem Hospital, so that he had a long vista to look back upon. The whole of the work was moving along the lines which Dr. Soutar had pointed out. It was fully recognised that the continental workers had more journals devoted to the specialty, and that they wrote more. It seemed to him sometimes that it would be a good thing if the output of medical literature were suspended for a whole year, then there might be a chance of digesting what had been written before. But it should be remembered that mere piling up of facts was not knowledge. One of his favourite epigrams was that knowledge was the result of forgetting, and it was clear that one had to forget a great deal, and it seemed that a good many of the theories which emanated from the continent and elsewhere did not ultimately tend to increase curative power. He had a full appreciation of the work being done, but he thought there was cause for congratulation that men like Soutar were carrying on the treatment of mental cases in the most practical and thorough way. The question of the new diploma was a serious one. He felt that it would be a very good thing if granting a diploma would encourage assistant medical officers to do more clinical and pathological work. He regretted that the College of Physicians of London was not prepared to grant

the special diploma: they seemed impressed with the fact that there were to be special diplomas in ophthalmic surgery, tropical medicine, and so on. There was, however, need for encouraging the younger men in the department. The diploma in psychiatry was not to be essential, but was to be regarded as a means of encouragement. But he was becoming verbose, and must revert to his theme, namely, to propose a hearty vote of thanks to Dr. Soutar. He had heard the majority of the Presidential addresses for forty years, and it would be hard to say that he had heard one which was more satisfactory, at all events from his point of view.

Dr. SIDNEY COUPLAND said he had been asked to second the motion, and he did so with great pleasure, not only because Dr. Soutar had long been a personal friend, but because of the value of the address which he had just delivered. To some of those present—perhaps even to himself included—certainly to the more enthusiastic, the address might have seemed to be somewhat of a cold douche. But one must remember that the action of a cold douche was therapeutical, and therefore the effect of it should be a very invigorating one upon their mental outlook, and especially in regard to the questions with which this Association was concerned. Upon consideration, he thought they would agree with Dr. Soutar in almost everything which he had said, though at first sight it might seem that there would be differences of opinion. To take the first of the two questions which he raised. It was one which had been long in his mind, and during the greater part of his official existence he had asked himself why it was that, in connection with mental disease—mental hygiene if the term were preferred—we could not receive in this country such official encouragement of research as had long ago been accorded to other branches of hygiene? There was, in his opinion, a very good claim for that, because he remembered that in the reports of the medical officers of the Privy Council, which preceded those of the Local Government Board, and in fact long after the adviser to the Local Government Board was constituted, there appeared, year by year, a very elaborate research—which he did not think anybody read—which filled many pages, and dealt with the chemical constitution of the brain and nervous system. It was contributed by his old colleague in the College of Physicians, who received from the State a certain remuneration for giving that information concerning pure chemical research. It was no doubt of great value, but he did not know that much benefit had been reaped from it. Having that precedent in his mind, he thought it was possible to approach the authorities who held the purse-strings, with a reasonable request for similar encouragement to other workers in this department. But there always came back the view which Dr. Soutar had well maintained, that it was necessary to show that what was being done was really for the permanent good, and would have, and was having, tangible results. He did not think Dr. Thudicum's researches were precisely of the class for which State endowment should be demanded. But he hoped that not many years would pass before one saw such recognition of suitable scientific research in our department; for he thought everything should be done to encourage the work now being so well pursued in many parts of the kingdom, particularly in London, Cardiff, and Lancashire, as well as the West Riding of Yorkshire, where there were bands of young men working earnestly at the subject. The other question on which he would say a word was the Diploma. That had been brought under the notice of the Commissioners, and they had endorsed it with their blessing, so far as that might be expected to have any effect. The Commissioners thought it a great thing to encourage the younger men in the profession to aim higher than apparently they did at present. Their lives were somewhat humdrum and monotonous, and unless they could aspire to something better, they would probably soon leave the service, and thus the specialty would be deprived of the benefit of many energetic minds. For that reason, he considered that the establishment of the diploma was a good step. He did not think it was necessary to have many diploma-granting bodies scattered over the country, but it was wisely recognised that opportunity should be given to obtain the distinction. But it must be admitted that that was not all that was requisite; the guinea stamp was not everything, and in dealing with the insane there were many qualities far superior to any which could be acquired with a diploma. Too high a value must not be placed on the diploma *per se*; it should, however, be regarded as an encouragement to men to adhere to, and work in, the specialty.

The resolution of thanks was then put, and cordially carried.

The PRESIDENT thanked the meeting for the way in which his paper had been received. There was probably much in it which could not be fully accepted, but a little difference of opinion on matters under discussion was not unwholesome.

JOHN FREDERICK BRISCOE, M.R.C.S., "Appendicitis in Asylums" (see p. 622). The paper was discussed by the PRESIDENT, Sir GEORGE SAVAGE, Mr. BUCKELL, Dr. PERCY SMITH, Dr. BLAIR, Mr. WALLACE, Mr. HOWELL, and Dr. MENZIES. Dr. BRISCOE replied.

Dr. MCKINLEY REID, M.B., "Bacteriology of Forty Cases of Diarrhœa, with Special Reference to Asylum Dysentery." The paper was discussed by Dr. MENZIES, Dr. POPE, and Dr. GOODALL. Dr. MCKINLEY REID replied.

SECOND DAY.

The PRESIDENT, Dr. SOUTAR, was in the Chair.

Dr. THEO B. HYSLOP read a paper on "The Mental Deficiency Bill, 1912" (see p. 548). This led to a very valuable discussion on the legislative proposals for the care and control of the mentally defective, in which the following took part:—The PRESIDENT, Dr. SPENCE, Dr. SHUTTLEWORTH, Dr. LANGDON DOWN, Dr. DOUGLAS TURNER, Mr. C. H. DEAVIN, Dr. BOWER, Dr. AUDEN, Dr. GILL, Dr. WOLSELEY LEWIS, Dr. WILLIAM R. DAWSON, Dr. DRAPES, Dr. NEEDHAM, Dr. HAYES NEWINGTON, Dr. HARRY CORNER, Dr. MIDDLEMASS, and Dr. MCRAE. Dr. HYSLOP replied.

During the course of the discussion the two following resolutions were carried unanimously.

(1) "That we, the Medico-Psychological Association of Great Britain and Ireland, cordially endorse the action of our Irish Division in endeavouring to have the provisions of the Mental Deficiency Bill extended to Ireland, and we would urge upon the Government the necessity of introducing into the Bill the modifications necessary for that purpose."—Proposed by Dr. DAWSON and seconded by Dr. DRAPES.

(2) "That a deputation to be chosen by the President, past President, and President-elect, be appointed to wait on the Home Secretary and any other Government official whom it is thought desirable to interview, to lay before them the views of this Association, so far as they have been expressed, respecting the Mental Deficiency Bill."—Proposed by Dr. MIDDLEMASS and seconded by Dr. MCRAE.

THANKS.

Dr. HAYES NEWINGTON said he knew that the meeting would wish to pass a hearty vote of thanks to their hosts for their kindness in permitting the Association to hold its meetings in the Guildhall. Nobody knew the amount of good which was done by the cordial receptions which the Association experienced at the hands of high authorities. Such things made the work easier, and he believed it improved the status and quality of the work. It was also usual to congratulate the President on a successful meeting. He could personally congratulate Dr. Soutar on his address, and he would add to that an appreciation of his kindness in making such preparations for the meeting as he had done.

Dr. DAWSON seconded the vote of thanks with much pleasure and it was carried by acclamation.

IRISH DIVISION.

THE Summer meeting of the Irish Division was held at Londonderry District Asylum on July 2nd, 1912, by the kind invitation of Dr. Hetherington.

Dr. W. R. Dawson, President, occupied the Chair, and there were also present Drs. Hetherington, Nolan, Greene, Oakshott, O'Doherty, Plummer, and Leeper, Hon. Sec. Letters of apology for unavoidable absence were read from Drs. Drapes, William Graham, Lawless, Courtenay, Moore (Letterkenny), O'Mara (Ennis), and F. E. Rainsford.

The minutes of the previous meeting and of the special meeting were read and

signed. A letter from Mrs. Cullinan acknowledging the resolution of sympathy in her bereavement was read. Letters were read from the Chief Secretary for Ireland and from members of Parliament in reply to the communications addressed to them enclosing resolutions passed at the previous meeting relative to the Asylum Officers Pensions and Employment Bill. Dr. Hetherington, having been duly nominated, was elected representative member of Council to succeed Dr. Drapes, who had been elected co-editor of *The Journal of Mental Science*.

Dr. Gervase Scroope, Resident Assistant Medical Officer, Central Asylum, Dundrum, having been proposed and seconded and ballotted for, was declared unanimously elected an ordinary member of the Association.

The meeting next proceeded to consider the possible extension of the Mental Deficiency Bill to Ireland, and the Hon. Secretary submitted an explanatory statement which had been drawn up by the sub-committee appointed at the Special Meeting to consider the matter, and read replies from the Chief Secretary for Ireland, members of Parliament, and the secretaries of the Philanthropic Reform Association and of the county councils, all of whom were favourable to the extension of the Bill to Ireland.

Copies of resolutions from Downpatrick, Londonderry, and Carlow District Asylum Committees were read, and it was noticed with pleasure that these were strongly in favour of proposed extension. It was reported that similar resolutions were passed at Londonderry, Enniscorthy and Richmond Asylums, whilst other asylum committees were at present considering the subject, and were favourable to the Bill's extension to Ireland.

A lengthy discussion followed, in which the President, Dr. Nolan and Dr. Greene took part.

Dr. Nolan proposed to endeavour to estimate the amount of money which would be requisite in order to include Ireland in the Bill, and as the sum of £150,000 was named for England and Scotland it might be expedient to name a sum for Ireland to enable the Bill to be applied efficiently to this country.

Dr. Greene considered it more expedient to leave the matter in an indefinite way for the present, and this was finally agreed to.

A further report of the sub-committee was submitted with suggestions for the modification of the clauses of the Bill so as to render it applicable to Irish procedure and the existing state of the law in this country.

This statement was read and carefully considered by the members, and a resolution was proposed by Dr. HETHERINGTON and seconded by Dr. OAKSHOTT and passed unanimously: "That these amendments to the Mental Deficiency Bill, adapting the Bill to Irish conditions, drawn up by the Sub-Committee, be approved of."

The PRESIDENT kindly gave most valuable information as regards the Bill and its chance of passing into law.

Dr. O'DOHERTY read a paper on "Some Features of the Recent Enteric Epidemic in Omagh," which was fully discussed by the members present.

Dr. HETHERINGTON gave his experience of a similar but more virulent epidemic which occurred at Londonderry Asylum some years ago, and which was caused by a defective system of drainage. He said that the appearance of rats in an asylum was very serious and nearly always indicated that the drain-pipes were improperly jointed; the drainage in his asylum had been relaid in consequence of the epidemic and there had not been any cases of enteric fever or serious attacks of erysipelas amongst the patients for many years.

Dr. GREENE spoke of his experiences of an epidemic of typhoid fever at Ennis Asylum. In this epidemic no typhoid bacilli were found in the water supply; the possibility of a typhoid carrier being in the asylum at the time was suggested.

The various tests used in the diagnosis of enteric were discussed. Dr. LEEPER said that in his limited experience much faith could not be placed in the Widal reaction. As the early recognition of the presence of enteric in an asylum community was all-important, these various pathological tests for enteric fever were most interesting and an important study.

Dr. O'DOHERTY had noticed several cases of marked improvement in the mental symptoms and even recovery in these enteric cases, as the apparent result of the febrile states produced in the patient. The treatment of insanity by the exhibition of thyroid extract was considered in connection with these recoveries.

Dr. NOLAN thanked Dr. O'Doherty for his paper and said that he considered patients in the Omagh Asylum were particularly fortunate in having such a careful observer and skilful physician to attend them.

The PRESIDENT paid a warm tribute to the efficient manner in which this severe epidemic had been dealt with by the staff of Omagh Asylum.

Dr. O'DOHERTY thanked the members for their reception of his paper and replied to the various points raised in the discussion. He stated that he set great value on the Widal reaction when confirmed by other tests. The drains at Omagh Asylum had been recently laid but jointed with Portland cement, which had cracked, causing leakage. Medina cement was now considered better than Portland for this purpose.

Dr. PLUMMER exhibited scissors which he had designed for possible use in asylums. The points were blunt, and by a blocking arrangement at the joint the scissors could only be opened sufficiently to allow of thin material being cut. Dr. Plummer stated that he was engaged upon the construction of a better working model.

Dr. HETHERINGTON hospitably entertained the Division at luncheon.

The PRESIDENT proposed the health of Dr. Hetherington, and thanked him for the hospitable manner in which he had entertained the Division at Londonderry; the toast was most cordially received by the members present, and Dr. Hetherington returned thanks in a kindly appreciated speech.

After luncheon, the members, under the guidance of Dr. Hetherington and his staff, visited the New Branch Asylum and spent a most enjoyable afternoon.

THE ANNUAL DINNER.

The Annual Dinner was held on Thursday evening, in the Guildhall, and there were about seventy present. Dr. SOUTAR presided. Among the guests were the High Sheriff of Gloucestershire (Mr. Jenner Fust), the Deputy-Mayor of Gloucester (Mr. Bruton), Mr. Hyett (Chairman of Quarter Sessions), Mr. Colchester-Wemyss (Chairman, County Council), Mr. E. S. Hartland, and Mr. Sheffield Blakeway.

THE TOASTS.

THE KING.

The PRESIDENT, in submitting this toast, stated that wherever Britons were gathered together it was sure, without a word from the proposer, of being received with acclamation.

THE QUEEN, QUEEN ALEXANDRA, THE PRINCE OF WALES, AND THE REST OF THE ROYAL FAMILY.

The PRESIDENT next proposed this toast, pointing out how their Royal Highnesses had added dignity to their high estate by the interest they always took in the joys and sorrows of the people, by which means they had won for themselves the love of the nation. The toast was musically honoured.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The HIGH SHERIFF OF GLOUCESTERSHIRE (Mr. JENNER FUST) said that when he was invited to be present at this gathering he esteemed it a very high honour, and he did not think there was an honour still higher in store for him, namely, to propose success to the Association. The history of the Association was well known to those who were connected with it, but for the benefit of those who were not members of it, but were partaking of its hospitality, he might observe that, like many other great things, it had its origin in small beginnings. About seventy years ago a few gentlemen met together occasionally, at each other's houses, in order to discuss points of interest in respect to the care and treatment of the insane. They derived considerable benefit from that interchange of opinion, and they were

naturally anxious that others should participate in it. Hence came additions to the numbers associated with it, and an enlargement of the sphere of operations, until there was now a membership of over 700. Its operations extended over the whole of Great Britain and Ireland, and he was told that its influence was felt to the remotest end of the British Empire. Not only so, but foreign countries had considered it wise to adopt the methods and the constitution of the Association as a model for their own guidance. In Gloucestershire they were familiar with a somewhat similar instance of large results from small beginnings. It was now forty or fifty years since a few chairmen of boards of guardians met together at Hardwick Court, not many miles from where they were now assembled, at the invitation of that well-known philanthropist, Mr. Baker, to talk over points connected with the Poor Law. They found very great advantage from that interchange of opinion, and they sought to extend the usefulness of those conferences. The result had been that the whole of England and Wales had been, for many years past, mapped out into districts, each of which held its own conference once a year on Poor Law matters, and each sent representatives to a central conference in London, which had grown to such an extent that the council chamber of the London Guildhall was not large enough to accommodate those who were anxious to be present. These two cases were somewhat parallel, and were also alike in being instances of what he regarded as one of the glories of this country, namely, the enormous amount of work which gentlemen were willing to do voluntarily and without any hope of reward for the general good of the community. The objects of the Association were well known, and they had been briefly stated to be improving the general condition of patients, and to encourage the more advanced administration of asylums. With those objects in view the Association had encouraged the careful study of the scientific aspects of insanity. They had spent a vast amount of time and labour in training nurses, some thousands of whom had been examined and certified after a course of training. Above all, the Association had laboured to demonstrate that insanity was a definite disease and demanded strict medical treatment in all its phases. But he must not pursue that line of thought or he would speedily get out of his depth. However, assuming that insanity was a definite disease which had to be dealt with, it was interesting to think how far the system obtaining in this country succeeded in supplying the want. Was our system one by which anyone attacked by that definite disease could be sure of receiving the treatment most likely to result in the cure of the patient? He feared that, in spite of all that had been done, the answer could not be altogether in the affirmative. That was not the place to enter into details, but he would like to say that what we seemed to lack, and what we ought to have, was one strong central authority charged with the care of the whole of the cases of mental deficiency or mental aberration from the case of "Simple Susan" to that of the dangerous homicidal maniac. Such a body could, no doubt, work through local authorities acting over a large area, at least the area of a county, and possibly even a larger area; and it might avail itself of all the existing machinery while having the power to supply what more might be found to be required. He therefore pleaded for a large central authority, and he confessed he regretted the proposals which had been made in the Mental Deficiency Bill which was now before the Houses of Parliament, and which sought to set up a new body of Commissioners, acting independently of other bodies, and charged with the care of the class usually spoken of as feeble-minded. Surely that class was only part of a much greater whole, which ought to be dealt with by one sole authority. In submitting the toast of the Association he wished it God-speed in its work of endeavouring to ameliorate the condition of what was perhaps the most pitiable class of the whole community. He coupled with it the name of the President, Dr. Soutar.

Dr. SOUTAR (President) expressed his thanks to Mr. Jenner Fust, on behalf of the Association, for the favourable appreciation he had given utterance to, and for the hopes he had expressed for the Association's continued prosperity and success. He also thanked his hearers for the hearty way in which they had responded to the happily worded sentiments of the High Sheriff of the county. Earlier in the day, and speaking to a somewhat different audience, he mentioned that the Association originated in Gloucester seventy-one years ago—it would be seventy-one years on the 27th of this month. So that in addition to the very powerful body to which the High Sheriff alluded, the Medico-Psychological Association

was a Gloucester institution. He did not wish to dwell too much upon that lest "the stranger within their gates"—for by right of settlement in the county he claimed to be a Gloucester man—should assume there was, mixed up with pride at the circumstance, a sense of surprise that anything so great and useful as their Association should have originated in the county. He assured the company there was no reason for any such suspicion. On the contrary, they believed that the reason for the extraordinary vitality and vigour of the Association was to be found in the fact that it was born and cradled in the county of Gloucester. He did not wish to pursue that subject too far, but merely to indicate that these qualities were strongly in evidence very early in the Association's career. For, in its early days, it withstood a shock such as had proved the undoing of a large number of youths and youthful enterprises. It was absolutely discarded and disowned by its parent. That interesting episode in the Association's history would perhaps bear re-telling. Dr. Hitch, who was superintendent of Gloucester County Asylum in 1841, was the parent of the Society, and he took very great interest in its doings. Suddenly it was noticed that he ceased to do so, but no explanation of the change of attitude was given. He simply ignored it. Men wondered, but could not understand why the change had come about. The good Dr. Hack Tuke, who was a friend to many outside the Community of Friends, to which he belonged, determined that he would, if possible, unravel this mystery. He approached Dr. Hitch tactfully, found that he was injured in his feelings, and that the wound had been inflicted by a President who was occupying the position which he, Dr. Soutar, now occupied, at one of the annual gatherings. Looking at the company who had done justice to the good things before them, and carried away by the social success of the evening, he jumped to the conclusion that the Society had been to the festive manner born, and declared that it had come into being at a convivial assembly at the Gloucester County Asylum. That reference hurt Dr. Hitch very much indeed. Some might think it was stupid of him to take notice of what a President called upon to make an after-dinner speech might say. He might have remembered that great men and great enterprises had first seen the light in very queer places. Dr. Hitch was not a philosopher, he was a parent, and parents were proverbially touchy when things were said about their offspring. Dr. Hitch, instead of doing what most others would probably have done, namely, "gone for" the President who had made the statement, simply ignored his child. But it should be remembered that when feelings are hurt, conduct might be very erratic. His child had been branded as the product of conviviality. Dr. Hack Tuke, being a true conciliator, did not pooh-pooh his feelings, but he understood, and entered into them. As a great lover of historical accuracy, he published the necessary correction that the Society came into being only after a prolonged and tedious labour of two days. This at once satisfied Dr. Hitch, his pride in his infant was restored, and he resumed his paternal interest in the Association. He, Dr. Soutar, believed that the first to wish the young society success were the Committee of the Gloucester County Asylum; and that sympathetic interest on the part of laymen with whom members worked had continued down to the present day. Most of those present owed it to their Committees that their difficulties were diminished and their purposes were promoted. As an Association, they had again and again been welcomed by laymen eager to show their interest in the work. It was delightful to come back to Gloucestershire and find that the spirit which actuated the Committee of the Gloucester County Asylum over seventy years ago still moved the laymen of the county to-day. The Corporation of the City had shown their interest by placing at the disposal of the Association the Guildhall for their meetings and for this dinner, and amongst those now honouring the Association by their presence were some who were most prominent in the public work of the county and the city; and they had joined with the High Sheriff of the county in expressing their hopes for their continued well-being, and in recognition of the work which, so far, they had been able to do. In the name of the Association he thanked them.

THE CITY OF GLOUCESTER.

Dr. HAYES NEWINGTON proposed the toast, "The City of Gloucester." He said it must have been in a very giddy and heedless moment that he surrendered

to the President's suggestion that he should accept the responsibility of proposing the toast which had been allotted to him. But at the time he remembered well the many happy days he spent not far from that city, and thought that memory would provide some inspiration as to what he should say. It was at a spot between the Forest of Dean on one side and the glorious Severn on the other where, as a boy fifty years ago, he spent those days. It was a land which flowed with ginger-beer—home-made—figs, grapes, and everything which a boy could desire, with an occasional hornet to remind one of the mutability of human affairs. It was his custom to visit the city and go to the cathedral to hear Dr. Wesley's glorious music, and sometimes to see the old Mop Fair, which had now been removed from the city; and occasionally to buy tobacco and a little pipe, wherewith to indulge himself surreptitiously—one could not sin in cigarettes at that time. But when he came to consider all these matters, he found, as a psychologist, it was impossible to transmute such emotions into anything like a suitable basis for this toast. So he had to go to history. But to-night he found that he had misread his history. He had an idea that Gloucester was started by some of the cheap trips run by the Danes and Saxons of the time. But Mr. Waller had just told him that the Romans had left a very comfortable city for these cheap trippers to stop in, and they stopped. A study of the whole question led him to deduce two things: First, that Gloucester stands where it did; and secondly, that it had stood in that spot a tremendously long time. And from there it was reasonable to further deduce that it would stay there for a long time yet. But by "standing" he did not mean standing still, because one saw evidences all round in many ways of advance. Even in his short time he could see that the city had improved greatly. And he thought one might take that great hall in which they were dining, with the spacious and very comfortable offices attached to it, as evidences of betterment, because he was sure the Romans did not build them. He would like to embrace the opportunity of unofficially offering a particularly hearty vote of thanks from the Association to the Corporation for kindly allowing the use of the hall. They would be the recipients of an official vote of thanks in due course. He could say with absolute certainty that the tedium, if there were such attached to a meeting of this kind, was enormously relieved by such a reception as they had had. He coupled with the toast the name of the Deputy-Mayor of Gloucester: "May Gloucester thrive for ever, and may those who take such great care of it, live for ever!"

The toast was heartily pledged.

THE DEPUTY-MAYOR OF GLOUCESTER (MR. BRUTON), in replying to the toast, said he much regretted the absence of his Worship the Mayor, because if he had been present to respond to the toast he would have spoken with much greater authority than he himself could. But on behalf of the other members of the Corporation he wished to thank the proposer of the toast for the kindly reference he made to the city authorities, and to assure Dr. Newington and the other members of the Association that it was with the greatest possible pleasure that the Corporation acceded to the request to place the Guildhall at the disposal of the Association for its meeting. The Treasurer said he did not believe the Romans built that hall. It was true, but it was erected on the site of the old Roman *prætorium*, so that even in that respect the connection with their forefathers was maintained. They were very proud indeed of this old city, which was full of historic interest and antiquarian lore, and those whose bent was that way could indulge it to any extent. So far as the commercial side was concerned, their merchants were enterprising, and the tradespeople were up-to-date; and although they did not experience those waves of prosperity which were known as "booms," yet, on the other hand, they did not have those great periods of depression which visited most places in this country. With regard to the Corporation, he thought the success which it had so far achieved was mainly owing to the fact that so many members of the medical profession joined its ranks. He would not detain the gathering longer, because if an antiquarian discussion were to be started with the Treasurer, more time would be occupied than could be spared; but they were very proud of all their buildings in Gloucester, and especially the Royal Infirmary. And the citizens were proud of the medical profession, whose members unstintingly gave their services on behalf of that noble institution. In thanking the Association for its generous hospitality, it was a matter of great interest to hear of the birth of the Association

having taken place in the City of Gloucester. He was sorry to hear there was a little disagreement afterwards, and that might account for the long period which had elapsed before the Association revisited its birthplace. It reminded him of the familiar phrase in the "agony" column, "All is forgiven, come home at once." (Laughter.) He expressed the hope, after what had been said about Gloucester, and the pleasure which had been experienced from the visit, that the City might have the honour, at no very distant date, of welcoming the Association again.

THE VISITORS.

Sir GEORGE SAVAGE, in proposing this toast, said he had much pleasure in supporting his friend, Dr. Soutar, in any way he could. The Association had great pleasure in receiving its guests; they knew the interest which the world at large took in its aims at the present time. It was felt that we were now at the turning point. There was a time when the lunatic was simply someone who had to be shut up. That was followed by a time when he had to be shut up and looked after kindly. But now every attention was concentrated on how he was to be cured; and one felt that the meeting of the Association was but one step forward in that great work, for in every direction the question was asked, not only how could insanity be cured, but how could its increase be checked? The question of the feeble-minded and the Bill which had been promoted for dealing with them was one of immense importance, although he was free to confess that some went too far. A short time ago he took the chair at a drawing-room meeting on this subject, and he was obliged to sum up in the end in this way: "It seems that many of you who have spoken to-night think that everything that is foolish and eccentric should be removed. If the world were to be deprived of everything that was eccentric, if all the eccentrics and the fools were to be segregated, the world would be very uninteresting, and it would be a place scarcely worth living in." It must be remembered that there was an intolerance of suffering in our friends and a tendency to get rid of them; and he felt that such a tendency was not to be encouraged too much. He was sure their guests would appreciate the work which the Association was doing and trying to do, and he had much pleasure in associating with the toast the names of two gentlemen, Mr. Hyett, Chairman of Quarter Sessions, Chairman of the Education Committee and Chairman of Barnwood House, and Mr. Colchester-Wemyss, Chairman of the County Council. There were guests present who were not medical men, but who were working with them, and one felt that in all the large hospitals in London the greatest work was being done by the co-operation of the laymen with the doctor. Let there be no jealousy. One felt that chairmen were a power, and such power as was exercised by the gentlemen he had named he felt sure could be for nothing but good.

Mr. F. A. HYETT thanked the company for the reception they had accorded to the toast. Like the High Sheriff, he esteemed it a great honour to have been included among the guests, and he was proud to welcome the Association to Gloucester. His pride was enhanced by the fact that the President, Dr. Soutar, acknowledged that he was one of the Gloucester people. Still further was his satisfaction enhanced by the statement, which he was not previously aware of, that the Association was born in the City of Gloucester. The High Sheriff had described the different objects which had combined to call the Association into existence. The first of those objects was doubtless appreciated by all the world. In his few remarks he proposed to touch on only the third, namely, research into the causes of insanity. Of course the scientific and those who had any pretence to culture fully realised its value, but he did not know that it was adequately appreciated by all sections of the public. As the High Sheriff hinted, some were alarmed at the name "research," and he knew that even intelligent, practical men of business were a little shy of the subject. He remembered an anecdote concerning the period of his childhood which seemed to illustrate that view of the subject by a section of the public. It would be remembered by some that the arrangements for the 1851 Exhibition were made by a committee, presided over by the Prince Consort, or, as he then was, Prince Albert. The Prince, in his opening remarks, said he thought it would be convenient if the business were conducted under two categories. A subsequent speaker, who was a London merchant, commented on the phrase, and

said he hoped the Prince was not going to introduce German metaphysics into the discussion. He, Mr. Hyett, congratulated the members of the medical profession on the importance of their work. That, perhaps, was not a great compliment, as there was so much work of importance. Indeed, he thought that anyone to whom public work was entrusted had much to be congratulated upon, except, perhaps, Chancellors of the Exchequer. But he congratulated members of the Association on their work because of its special character. It embraced such a large field. So much had been achieved in the fields which the explorer traversed that sometimes—perhaps erroneously—one was inclined to think there was not much more to be found out or to be done. We had seen the dreams of Leonardo de Vinci become accomplished facts; sights and sounds which, in their essence, were evanescent, we had seen imprisoned and made capable of frequent repetition, not always to the advantage of those who took their pastime on the river. We had seen the spots on the earth's surface which were not capable of accurate delineation getting less and less and rapidly disappearing. The work of the specialty now represented was not of that character. Unlike the work of Sir Samuel Baker, a Gloucestershire man, they had nothing to do with tracing rivers to their source; it was for the medical men present to examine the springs of thought; their work lay in that dim realm where mind and matter meet—at present an almost unknown country. What tremendous possibilities were before the specialty! Who would venture to predict the nature of the discoveries which they might make? But he felt they might rest assured that in their labours to reduce mental and physical suffering it might very well be that they would make additions to the sum of human knowledge which would necessitate the reconstruction of ethical systems and the revision of creeds. He thanked the company for the reception given to the toast.

Mr. COLCHESTER-WEMYSS (Chairman, County Council) also responded. He said that a friend of his, who was addicted to the pernicious habit of reading the daily newspapers, and to whom he imparted the fact that he had been invited to this dinner, assured him, the speaker, that he was undergoing a serious risk. From his study of the newspapers, that gentleman believed there was a sort of volcanic eruption going on in the medical world at the present moment, and that if he, Mr. Colchester-Wemyss, trusted himself into an assemblage of doctors nobody could be answerable for the results. He, however, decided to go through the ordeal, and he had had no reason to regret the decision. So far as he could see the visitors had been received with every urbanity and courtesy, as well as with all possible hospitality. In fact, as far as his experience of the members of the Association was concerned, it appeared to him they might be correctly described as "the mildest mannered men who ever scuttled ship or gouged an eye." On behalf of the visitors, especially those who belonged to the county of Gloucester, he wished to express their great gratitude for the hospitality received, and the earnest hope that the Association's experiences of the ancient and interesting city of Gloucester, and the picturesque county of that name, would be such that the members would be tempted, long before such an interval as that since 1841 had elapsed, to return to that city and county.

THE PRESIDENT.

Dr. NEEDHAM said he had been asked to propose the next toast, and he felt it a great honour that the request had been made. He regarded that as the toast of the evening. It was the toast of the health of the President of that great Association, Dr. Soutar. (Applause.) The toast was evidently a popular one, from the applause, and he proposed it with the greatest possible pleasure. It enabled him to express, on behalf of his colleagues who were not able to be present, their great regret that they could not be among them, and their best wishes for the success of Dr. Soutar during his year of office, and of the Association generally, in which they took the keenest interest. He was also glad to propose the toast as a token of his deep and sincere regard for Dr. Soutar, with whom he had been on terms of warm intimacy and friendship for nearly thirty years, during nine of which they were colleagues. He and the present company knew enough of Dr. Soutar to feel sure that the honour and dignity and the influence of that great Association would suffer no depreciation during his presidency. He would ask them to drink very heartily to Dr. Soutar's good health and great success and prosperity during his year of office.

Dr. Soutar, in reply, said this was just one of those occasions when "ordered words asunder fly," and one found oneself unable to give expression to the ideas which were pressing each other in one's mind. To have had his health proposed in such kindly terms by Dr. Needham was an honour and a delight to him, such as he could not express. He looked back to his time with Dr. Needham as being that to which he owed any success which he had had in life, and it was that which placed him in his present position that day. To have had the advantage, in the plastic and mouldable years of life, of coming under the influence and example of Dr. Needham had given to him everything to which he, in his professional life, had attained. He could only thank Dr. Needham most sincerely for the friendly and kindly expressions he had used towards himself, and the company for the kind way in which the toast had been received.

MENTAL DEFICIENCY BILL.

SELECT COMMITTEE OF THE PARLIAMENTARY COMMITTEE OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

W. R. Dawson, H.M. Inspector of Lunatic Asylums, Ireland; Ex-President Medico-Psychological Association.

J. G. Soutar, Medical Superintendent, Barnwood House; President Medico-Psychological Association.

Theo. B. Hyslop, late Senior Physician, Bethlem Royal Hospital (Chairman).

Harry Corner, Consulting Physician to the National Association for the Feeble-Minded.

G. E. Shuttleworth, late Medical Superintendent, Royal Albert Asylum.

R. L. Langdon Down, Consulting Physician to National Association for the Feeble-Minded.

F. W. Turner, Assistant Superintendent, Royal Eastern Counties Institution.

H. Hayes Newington, past President, Medico-Psychological Association.

J. Carswell, Certifying Physician in Lunacy, Parish of Glasgow.

H. Wolseley-Lewis, Superintendent of the Barming Heath Asylum, Kent.

Bedford Pierce, Medical Superintendent, The Retreat, York.

REPORT OF THE SELECT COMMITTEE TO THE ANNUAL MEETING APPOINTED TO CONSIDER THE MENTAL DEFICIENCY BILL.

June 16th, 1912.

Your Committee has held three meetings, and has carefully considered the Bill clause by clause and has to report as follows:

The kernel of the whole Bill lies in Clause 17, defining the persons subject to be dealt with by the Bill, and it must be borne in mind that such persons must come under both sections (1) and (2). On examination it will be seen that the subsections (a) to (f) and (a) to (e) are so framed as to include a very wide range of mental defectives, embracing habitual criminals, inebriates, the uneducable, the unemployable, the subjects of drug habits, and persons unfit to procreate. While agreeing with the inclusion of such persons in the Bill from a general standpoint, your Committee feel that the subclauses are too vaguely worded, and that further definitions are needed, particularly in regard to section (1) (e), dealing with those who are to be deprived of the opportunity of procreating children.

Your Committee are also strongly of opinion that the Board of Control, whether in the Secretary of State's or other Government department, should have as its first members the present Lunacy Commissioners, and have altered the Bill in accordance with this view.

Your Committee recommend that the following alterations be made:

Clause 2 (1): Delete from "any" (line 23) to "recommendation" (line 25) and substitute "a Board of Control and the first members of such Board shall be the persons who at the commencement of this Act are the Commissioners in Lunacy together with persons (one of them being a woman) to be appointed by the Secretary of State who may." Line 1, page 2: Delete "Provided that one" to "woman." (5), line 15: Delete "not exceeding three."

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Clause 5 (d), line 16: Add "or (with a view to their discharge) if the necessity for their remaining subject to this Act has ceased."

Clause 12, line 20: After "the" add "Commissioners and approved by the."
(a), line 23: After "Act" add "and direct the discharge of such persons as are no longer proper subjects under this Act." (c), line 29: After "defectives" add "who are subject to be dealt with under this Act." (i), line 40: "A" instead of "the."

Clause 18, line 10: For "a defective within the meaning of this Act" read "subject to be dealt with under this Act."

Clause 20 (5), line 2 (page 12): After "defective" add "and subject to be dealt with under this Act." (6), line 8: For "may" read "in the absence of a medical certificate shall."

Clause 24, line 17: Add after "Act," "but no such steps shall be taken until the parent or guardian has had opportunity of making suitable provision for it."

Clause 25. Add another subsection thus: "(5). Provided nothing in this Act shall prevent persons under twenty-one years of age being received into a certified house or institution on a medical certificate that he requires special care and treatment in such a house or institution."

Clause 27 (2), line 33: After "defectives" add "or other place of safety." (3), line 1 (page 16): After "defectives" add "or other place of safety."

Clause 29 (2), line 31: For "shall" read "may." (3), line 36: For "ought to" read "can." (3), line 38: For "shall" read "may."

Clause 38, line 6: After "The" add "Commissioners with the approval of." (c), line 10: Delete "and treatment."

Clause 42, line 11: After "defectives" add "if maintained out of public funds."

Clause 47 (1), line 5: After "persons" add "over sixteen years of age." (1), line 6: After "being defectives" add "subject to be dealt with under this Act." (2), line 11: After "person" add "over sixteen years of age." (2), line 12: After "defective" add "subject to be dealt with under this Act."

THEO B. HYSLOP (*Chairman*).

H. WOLSELEY-LEWIS (*Secretary*).

APPENDIX TO FOREGOING REPORT, JUNE, 1912.

Memorandum.—Inquiry and Visitation under the Mental Deficiency Bill.

It is recognised that the prime objects of the Bill may call for extension of power to inquire and visit, beyond that which is given under the Lunacy Acts. It is the purpose of this memorandum to point out where such extended power is given.

Generally speaking the Lunacy Act provides for inquiry into the condition of a person who is not under official observation, but is presumed or alleged to be insane under—

Sec. 13.—Constables, relieving officers, overseers, who have knowledge that any person, not a pauper, and not wandering at large, is deemed to be a lunatic and not under proper control and care, or is cruelly treated or neglected by a relative or other person, shall set the law in motion by informing a justice.

Sec. 14.—A medical officer of a union, who has knowledge that a pauper ought to be sent to an asylum, shall set the law in motion by giving notice to a relieving officer.

Sec. 17.—Any justice to whom such a case is reported may visit the alleged lunatic at the house of the latter.

Sec. 22.—In such cases a relative may take charge of the patient, if the justice is satisfied that proper care will be taken of him.

Sec. 205.—The Lord Chancellor or Secretary of State may at any time issue an order for the examination of a lunatic or alleged lunatic.

Sec. 206.—If it comes to the knowledge of the Commissioners that any person appears to be, without an order and certificates, detained or treated as a lunatic or alleged lunatic by any person receiving no payment for the charge in any establishment, not being an institution for lunatics, they may inquire and visit with a view to further action.

The Idiots Act has no provision of the kind.

It will thus be seen that visitation of persons of unsound mind who are outside official supervision is very carefully guarded, and that in no case can such a visitation be carried out by a subordinate without explicit authority.

Before inquiring into the procedure in cases of mere deficiency of mind it will be essential to note the relations of the term "defective."

Clause 1 (1) of the Act limits its meaning to mental defectives.

Clause 17 (2) describes the general interpretation put on the term for the purposes of the Act; such defectives are herein termed defectives-general.

Clause 17 (1) describes the defectives who, alone, are to be subject to be dealt with under the Act; and are herein termed defectives-subject.

The class of defectives-general is very large, and practically purports to include all persons whose mind is affected, except those who are actually insane, and fit for treatment under the Lunacy Acts, the supervision of whom is left in the hands of existing lunacy authorities—clause 1 (2).

At first sight the division of authority seems to be clear and complete, but it is not so, for while clause 1 (2) preserves lunacy authority over imbeciles and idiots, clause 17 (2) brings them under the Deficiency Act, if they fulfil any of the conditions of clause 17 (1). Further, under the Lunacy Act "lunatic" means an idiot or person of unsound mind. It has been held in a Court of Appeal (*Rex v. Shaw*) that imbecility arising from the decay of the faculties through old age or intemperance constitutes unsoundness of mind. Thus (e) of clause 17 (2) as well as (a) and (b) of the same clause are subject to the Commissioners' authority if brought under the Lunacy Acts, and will also be subject to the new authority if they fulfil the conditions of 17 (1).

The duality of authority, thus made possible, will be again mentioned in a further memorandum on "Overlapping," but, for the present purpose, it is pointed out that certain classes are now brought under arrangements for inquiries, etc., to which they were not subject under the Lunacy Acts.

The following are the provisions of the Mental Deficiency Bill bearing on the question:

Clause 5.—The power and duties of the Commissioners (Mental Deficiency).

(a) Exercise general supervision, protection and control over *defectives* (i.e., defectives-general).

(d) Visit either personally, or by their inspectors, defectives in institutions or (with a view to their certification) elsewhere.

Clause 12.—General duties of local authorities:

(a) To ascertain what persons within their area are defectives and are subject to be dealt with under this Act.

(c) To keep registers of defectives (i.e., defectives-general).

(e) To appoint or employ sufficient officers and other persons to assist them in the performance of their duties under this Act.

Clause 12. Provision (ii).—This removes certain defectives from the operation of the Act, but thereby appears to confirm power over all not so excepted, including those of clause 17 (2) who do not fall under 17 (1).

Clause 13 (1) throws on the Education Authority of an area the fresh duty of—

(a) Ascertaining what persons within their area are defective children within the meaning of the Act.

(b) Ascertaining which of such children are educable.

(c) Notifying to the local authority under this Act the names and addresses of defective children who are ascertained to be not educable, etc.

Clause 18.—Overseers, relieving officers, district medical officers of poor-law unions, medical officers of health, and constables who have reason to believe that any person is a defective within the meaning of the Act, shall notify the case to the local authority.

It appears that, if it is intended to adhere strictly to the interpretation of defectives-general as against defectives-subject, the former and their relatives are exposed to considerable prejudice, in the matter of visitation for making inquiries and by registration. With regard to elementary school children not much harm may be done by inquiring, as the Education Authorities have already considerable power in this direction under their own Act. But the registration of their names and the publicity entailed may be of serious consequence. With children of school age it seems only fair that the effect of special training should be awaited before

the stigma of permanent defectiveness is affixed to them, and this consideration should apply equally to children of the better social grade and to those of the elementary school class as bearing on their future prospects. An instance was given to the Committee of a girl of the former class who in early years was an apparent defective, but later on completely emerged from this condition as the result of suitable education, and is now training successfully as a hospital nurse. The fact of registration in her earlier years would have been fatal to her success, and in applying for a post she would have been always liable to have the registration as a defective thrown in her teeth. With adults great harm could arise. A young lady, æt. 20, in the midst of surroundings the most suitable for care and watching, if defective, would, under clause 17 (1) (e), be subject to the Act and exposed to registration and inquiry.

It is suggested that careful attention should be given to the provisions which deal with defectives-general and defectives-subject. These are:

Defectives-general: Clause 5 (a), (d); clause 12 (a) by implication, (c), (e) indirectly; clause 18; clause 13 (a) by implication (children only).

In regard to clause 18 it may be that the definition "within the meaning of the Act" is a mistake for "subject to be dealt with." The former interpretation leads to needless interference.

Defectives-subject: Clause 5 (d), (e); clause 12 (a), (b); clause 13 (c).

Dual Authority.

Clause 1 (1) of the Mental Defectives Bill preserves all the powers of the Lunacy Commission and of the Lord Chancellor. Both of these bodies have authority over certain patients, including idiots and several of the classes of mental deficiency defined in 17 (2). The present Bill aims, no doubt, at some division of authority, but while the Lunacy Acts are unrepealed responsibility for the above-mentioned defectives must remain on the Lunacy Commission. It has been held in a Court of Appeal (*Reg. v. Shaw*) that imbecility arising from decay of the faculties through old age or intemperance constitutes unsoundness of mind. Therefore any person thus becoming defective is on the responsibility of the Lunacy Commission. The old age defectives form a considerable portion of the subjects of the present Bill. As soon as such are declared by the action of the Bill they will fall under the dual authority.

The Lunacy Commission are appointed by, are under the control of, and report to, the Lord Chancellor, while under the Bill the Secretary of State is the chief executive officer in the matter of defectives. Thus in the highest quarters there will be dual authority.

At present no fresh licences can be granted under the Lunacy Acts, while under the Bill such can be granted for defectives. As the division of defectives is a matter of great difficulty, there is likely to be considerable friction and jealousy on the granting or not of licences, and undoubtedly there will be opportunity of evasion of the present law, unless proper, co-ordinated authority is at once instituted.

The relations between the educational authorities and the new authority, set up by clause 13, will possibly lead to trouble as to authority in border-line cases.

A very serious financial difficulty may arise thus:

Under the Lunacy Acts the capital expenditure in respect of defectives in asylums falls on the local authority, the maintenance falling on the Poor Law authorities, who receive the State grant of 4s. per week *per caput*, to meet the expense. Under the Bill both capital and maintenance charges fall on the local authority alone, who will receive a State grant of 7s. per week.

The 4s. grant was originally given to furnish some inducement to the guardians to send their acute cases to the asylum, instead of retaining them in workhouses, and thus depriving them of the treatment urgently needed. The effect of this inducement was marked, leading to the sending to the asylum not only of the acute cases, but also of the chronic defectives who gave the least trouble. This has led to the blocking up of the expensive asylum with persons for whom cheaper accommodation is now so urgently demanded. Whether or not the local authority, under the Bill, receives an adequate grant from the State, the same question of relative expense will always be in the mind of those on whom rests the

responsibility of placing defectives. Will it be cheaper to send one to the asylum and obtain for him the grant of 4s., or place him under the Bill, and pay only the balance of cost demanded of the ratepayers by the local authority? This amount will necessarily depend on the total cost to the local authority. Thus the location (and treatment) of the defective will be determined chiefly by finance and not by mental classification. In effect, if the authorities under the Lunacy Acts and those under the Bill are kept distinct, there will be constant friction on this head. If, however, they are combined, the question of location, being highly technical, can only be properly treated by the lunacy side of the central authority. This, among other facts, points to the present knowledge of the Lunacy Commission being utilised at once, and to that body being the predominant authority.

The greatest amount, available, of experience and special knowledge will be needed for the present setting up of a practice suitable for the purposes of the Act, when it becomes law, and as much experience is called for in tactfully securing due observance, in the future, of regulations made for those purposes. It cannot be too strongly urged that Mental Deficiency, such as is now thought to be brought under control, shades off, on one hand, into lunacy, with all its very special interests and requirements, and, on the other hand, into insignificant fatuousness. To set up and maintain anything like a satisfactory dividing line between these three conditions it is necessary to retain, as paramount, the services of those whose business it has been to guard jealously the boundaries set by existing legislation in regard to mental failure. This necessity is all the greater in view of a fresh departure which may introduce fresh interests and may lead, if not strictly guarded, to grave interference with liberty of the person and with the rights of those whose natural duty it is to care for afflicted relatives. The whole subject needs to be dealt with by a strong, independent and experienced authority, and with the least possible chance of friction.

FURTHER REPORT OF THE SELECT COMMITTEE.

September 26th, 1912.

The Committee has held several meetings since the report to the Annual Meeting was presented. The following are its conclusions to the present date. Attention has been given chiefly to Clause 17, since it is understood that the Standing Committee will consider it at an early date.

Clause 5 (e) and Clause 34 to delete the words "dangerous or violent."

Clause 17 (1) in place of "persons who are defective and" to insert "persons who are

" 1. idiots: or

" 2. imbeciles; or

" 3. feeble-minded and."

Note.—The Committee are firmly of the opinion that the qualifications *a, b, c*, etc., should be attached only to the feeble-minded so that idiots and imbeciles shall *ipso facto* be certifiable under any circumstances as is the case at present under existing legislation.

(1). (d) The Committee object to Mr. Hill's three amendments and support that of Mr. Locker Lampson, applying this provision to children on "or before" attaining the age of sixteen.

1. (e) The Committee would delete this, being of the opinion that medical knowledge is not so sufficiently advanced as to afford any definite guidance by which possible abuses that might occur under this provision can be obviated. It is felt that, if the Act is thoroughly administered, the feeble-minded who are capable of procreating children will before long be in safe keeping.

1. (f) The Committee would delete this. In place thereof they suggest a new provision:

"Who are in need of further care, control or treatment, and are a source of injury or mischief to themselves or others; or"

Note.—The principle of this was passed by Standing Committee "B" in the Feeble-minded Control Bill.

Following thereon,

(4) Moral imbeciles who need special care and treatment.

The Committee would delete the provision bringing the mentally infirm within the meaning of the Act for the following reasons :

They are beyond the legitimate scope of the Bill, and are incompatible, both in nature and requirements of treatment, with the other clauses enumerated in the clause. Further, this class is adequately provided for under existing legislation, such as the Lunacy Law and the Poor Law.

(2). (a and b) The Committee support the definitions of idiots and imbeciles, as given in the Bill.

(c) The Committee support the amendment of this provision, as proposed by Mr. Leslie Scott and other members, as follows : " Feeble-minded person, that is to say, persons who may be capable of earning their living under suitable supervision, but are incapable, through defect of mind existing from birth or from an early age, of managing themselves and their affairs with sufficient prudence to maintain an independent existence."

(d) The Committee propose that this provision should read : " Moral imbeciles ; that is to say, persons who from an early age display some permanent mental defect, coupled with habitual vicious or criminal propensities, on which punishment has little or no deterrent effect."

The definition of mentally infirm persons would not be needed if, as the Committee suggests, these persons are excluded from the scope of the Bill.

The Committee desire to say that while it is recognised that the definitions contained in the Bill are necessary for the administration of the Act, it is likewise recognised that they cannot be regarded as strictly scientific. In fact, it is apparent that no definition can be framed which will satisfy accuracy as well as the needs of practical administration.

At the end of the Clause 17 the Committee propose a new proviso :

" Provided that no person who can be certified under the Lunacy Acts 1890-1911, not being an idiot or imbecile, shall be subject to be dealt with under this Act ; and every medical certificate given for the purpose of this Act shall contain a statement that in the opinion of the certifier the person to whom the certificate relates cannot be certified as a proper person to be taken charge of and detained under care and treatment under the provisions of the Lunacy Acts, except as an idiot or imbecile."

The following communications have been supplied to the Journal independently of the Select Committee :

MENTAL DEFICIENCY BILL, 1912.

Special committee representing the voluntary institutions for idiots, imbeciles and the feeble-minded.—Earlswood: Mr. E. C. P. Hull (Chairman); Colonel R. H. Rawson, M.P.; Mr. Leslie Scott, K.C., M.P.; Sir George Savage, M.D., F.R.C.P. Royal Albert Institution: The Right Hon. Lord Richard Cavendish, P.C. (Chairman); Mr. C. F. Tetley (Vice-Chairman); Mr. E. B. Dawson (Vice-Chairman); Sir William Priestley, M.P.; Sir N. W. Helme, M.P. Western Counties' Asylum: The Earl of Devon (President); Major A. W. Neville Thomas (Chairman); The Hon. Lionel Walrond, M.P.; Sir John Spear, M.P.; Capt. E. F. Morrison Bell, M.P.; Major H. Du Buisson. Midland Counties' Institution: Mr. T. M. Colmore (Vice-Chairman); Mr. A. F. Bird, M.P.; Rev. T. W. Downing; Mr. A. D. Melson. Royal Eastern Counties' Institution: The Earl of Stradbroke (Chairman); The Viscount Clifden; The Hon. H. W. Pearson, M.P.; The Right Hon. James Round, P.C.; Colonel The Right Hon. Mark Lockwood, P.C., C.V.O., M.P.; Colonel Sir Courtenay Warner, Bart., C.B., M.P.; Sir Robert Price, M.P.; Mr. L. Worthington Evans, M.P.; Mr. Almeric Paget, M.P.; Mr. E. G. Pretyma, M.P.; Mr. John Wood, M.P.; Mr. H. A. Krohn, D.L.; Dr. Edgar A. Hunt.

Summary of Suggestions.

The representatives of the voluntary institutions for imbeciles urge :

(a) That, while receiving patients under the Idiots Act and remaining under its protection they should at the same time have power to receive and detain defectives, certified under the Mental Deficiency or the Education Acts.

This will probably need a new clause, and in clause 19 (a), line 16, and clause 20 (5), line 32, after the words "defectives," the addition of the words "or an institution registered under the Idiots Act."

(b) "That power be given to public authorities, including the education authorities, to contract with these institutions for the care, education and maintenance of defectives."

The following additions are suggested :

Clause 12, line 28, after the word "Act," add, "or sent to an institution registered under the Idiots Act."

Clause 24, line 14, after the word "Act," clause 36, lines 30 and 35, and clause 41, line 22, after the word "defectives," add "or an institution registered under the Idiots Act."

After Clause 13 (c), add "to contract with the managers of an institution registered under the Idiots Act for the reception, education and maintenance in these institutions of defective children for whom, in the opinion of the education authority, institutional care is desirable, provided the consent of the parents or guardians is obtained."

(c) That as there is no provision for money grants under the Idiots Act, words may be introduced into the Mental Deficiency Bill, sanctioning Parliamentary grants towards the expenses of defectives detained in the imbecile institutions registered under the Idiots Act, as though they were detained in institutions certified under the Mental Deficiency Act.

Clause 43, line 25, after word "defectives," add "or in registered institutions under the Idiots Acts."

The following suggestions, a summary of which appears on the first page, have been prepared for any deputation that may wait upon the Home Secretary to urge that some slight amendments be introduced to increase the usefulness of the voluntary institutions for idiots, imbeciles and the feeble-minded.

The voluntary institutions for idiots, imbeciles and the feeble-minded, possess amongst them nearly 500 acres of land with large buildings, freehold and unencumbered, the total value of which is, roughly, over half a million of money, besides endowment funds of varying amounts.

The total income of these institutions for the last completed year (including donations to building and endowment funds) was about £86,000.

These institutions have been maintaining and educating by charitable funds, for from forty to sixty-five years, not only a large number of free cases, but also cases for whom, on account of the parents' want of means, inadequate payments have been made.

They have been built, furnished and equipped at considerable expense in a thoroughly efficient manner and have been brought up-to-date in methods of education, training and sanitation. They possess boys' and girls' schools, workshops for technical training, farms, sea-side houses, and special departments for the younger children, cripples and epileptics.

As legislation will undoubtedly cause the diminution of charitable contributions, and as it is specially recommended by the Royal Commission that these institutions be continued, it is imperative that the money required for maintenance of patients (as well as for future extension) should be supplemented in some way.

The representatives of the voluntary institutions are in general agreement with the Government Bill, but with the view of enabling these institutions to be continued and extended in the future, they venture to suggest some amendments.

The Bill does *not* affect the Idiots Act, under which the voluntary institutions work.

But, on the other hand, these institutions are not included in any of the provisions of the Mental Deficiency Bill.

Therefore no patients can be sent to them under it.

The proposed local authorities cannot contract with these institutions to take patients.

The local education authorities cannot contract with these institutions to take defective children.

The Secretary of State cannot give these institutions any grant out of the money to be provided by Parliament.

There is a unanimous desire to remain under the Idiots Act under which so much good work has been done.

Because a large number of patients at present maintained in these institutions have no provision made for them under the new Bill, *i.e.*, ineducable children, etc.

The Poor law authorities would lose the power they now possess of contracting with these institutions to take Poor law patients.

Suggestions.

It is therefore suggested :

(1) That registration of an institution under the Idiots Act shall be equivalent to certification of an institute under the Mental Deficiency Act, in so far that any person who can be sent under certificate to any institution certified under the Mental Deficiency Act can, under the same certificate, be received into any institution registered under the Idiots Act.

(2) (a) That nothing shall prevent institutions registered under the Idiots Act and receiving patients under that Act, receiving, at the same time, patients certified under the Mental Deficiency Act.

(b) That nothing shall prevent institutions registered under the Idiots Act and receiving patients under that Act, receiving, at the same time, mentally defective children certified under the Education (Defective and Epileptic Children) Act, 1899.

(3) That the provisions of the Idiots Act shall apply to those now known as *feeble-minded*, in the same manner as though this class was actually mentioned in every place after the word *imbecile* in the Idiots Act.

Because the word "imbecile" in the Idiots Act was intended at the time the Act was passed to cover those who have since become known as the feeble-minded.

Because these institutions from their foundation have always provided for the class now known as the feeble-minded. Early annual reports and case books prove this, as well as the presence in the institutions of patients who have resided there for from twenty to sixty years, and who would now be called feeble-minded. This is of importance, as in the definitions contained in the Mental Deficiency Bill the term imbecile is used in a restricted sense, and does not include the feeble-minded.

(4) (a) That they remain under the control of their own Boards of Management.

(b) That there should be one central authority to control all classes of mental defectives.

(c) That the Commissioners, whether under the Secretary of State or other Government Department, should have as their first members the present Lunacy Commissioners.

(5) (a) That the proposed local authorities be empowered to contract with the boards of management of these institutions for the care, education and maintenance of any defective needing institutional care.

(b) That the local education authorities be empowered to contract with the boards of management of these institutions for the care, education and maintenance of any defective children needing institutional care.

It is the opinion of the representatives of the voluntary institutions that many of the children in the special schools, who will need permanent care, would benefit throughout their lives if it were possible to transfer them to institutions at an earlier age than that of sixteen. This will be facilitated by giving the education authorities the power to contract with the voluntary institutions.

(6) That if an extension of the existing buildings is considered advisable, some provision should be made for raising the money necessary for this purpose.

(7) That in consideration of these institutions with their lands, buildings, workshops and existing funds, which have all been provided by voluntary effort, being used for public purposes, the Secretary of State be empowered to contribute grants out of money provided by Parliament towards the cost of each defective thus contracted for; and that the grant be paid direct to these institutions.

(8) That institutions maintaining defectives certified under the Idiots or Mental

Deficiency Acts be exempt from any payments for these patients that may be due under the National Insurance Act.

The attention of Members of Parliament is called to the fact that the Mental Deficiency Bill makes no provision for the very large class of ineducable children, nor for those discharged from special schools or classes *before* the age of sixteen and still defective, and it is urged that at the least Clause 17 should bring definitely within the Act those discharged from special schools or classes *before* the age of sixteen and *still* defective.

A large number of the cases at present maintained in the voluntary institutions will not "be subject to be dealt with" under this Act, nor will they be eligible to receive any Parliamentary grant.

Attention is also drawn to the fact that the term "defective" will in the future have two contradictory statutory meanings. The Elementary Education (Defective and Epileptic Children) Act, 1899, excludes imbeciles from this term, the Mental Deficiency Bill proposes to include imbeciles in the term.

STATEMENT REGARDING PROPOSED LEGISLATION FOR THE MENTALLY DEFECTIVE
WITH REASONS WHY THE "MENTAL DEFICIENCY BILL" BE EXTENDED TO
IRELAND.

The growing sense of obligation to provide for the mentally defective in these countries who do not come within the scope of the lunacy laws is shown by the fact that there are at present three measures for the purpose before Parliament, *vis.*, the Feeble-minded Persons (Control) Bill, introduced under the combined auspices of the National Association for the Feeble-minded and the Eugenics Education Society, and read a second time on May 17th, 1912; the Mental Defect Bill, an ambitious measure supported by the Charity Organisation Society, and read a first time on April 15th, 1912; and lastly, the Government measure, the Mental Deficiency Bill, introduced on May 16th, 1912, and read a second time on July 19th, 1912.

All three measures were intended to apply to England only, but as the result of action taken by the Scottish authorities, Scotland has been included in the provisions of the Government Bill. Ireland is, however, expressly excluded therefrom by the 68th Clause. Yet Ireland stands in more urgent need of provision for the classes dealt with than either of the sister countries, there being no legal enactments affecting the mentally defective who are not lunatics, nor any means of dealing with them except the Stewart Institution, which is supported by voluntary subscriptions and cannot provide for more than about 100; whereas in both England and Scotland legal provision is made and institutions exist for dealing with several of the classes. In addition to this, the Report of the Royal Commission on the Care and Control of the Feeble-minded has shown that Ireland is worse off than either of the sister countries, whether as regards the actual numbers of mentally defective persons relative to the population, or as regards the proportion of these urgently in need of provision. Thus, it was estimated that there were in Ireland in 1906, 25,415 mentally defective persons outside of asylums, and that of these no less than 66·06 *per cent.* were in need of immediate provision, as against 44·45 *per cent.* in England and Wales and 34·57 *per cent.* in Scotland. It is, therefore, most disappointing that the country which is of the three the most urgently in need of provision should be that one which is expressly excluded from the scope of the Government measure, and at a Special Meeting of the Irish Division of the Medico-Psychological Association of Great Britain and Ireland, summoned to consider the matter, a resolution was unanimously passed urging the necessity of introducing modifications to the Government Bill so as to extend its provisions to this country. Copies of this resolution have been sent to the Chief Secretary, to all the Irish Members of Parliament, to the county councils and others, with the request that they will use their influence to carry it into effect.

The classes of persons proposed to be dealt with by the Bill are such idiots, imbeciles, feeble-minded persons, moral imbeciles and persons who have become mentally infirm from age or decay of their faculties, as are not properly provided for, or are in prison, or in a reformatory, industrial school or inebriate reformatory, or charged with an offence, or are habitual drunkards, or should not be allowed to

procreate children, or in whose case other special circumstances exist rendering it desirable to deal with them under the Act. They also include children discharged at the age of sixteen from a special school or class established under the Elementary Education (Defective and Epileptic Children) Act, 1899, and notified by the local education authority to the local authority under this Act; but as the Elementary Education Act does not apply to Ireland, and there are no special schools or classes and no local education authority, this part of the Bill would not be applicable.

It is proposed to make the county and borough councils respectively responsible for dealing with the above classes of defective persons as local authorities acting through a committee for the care of the mentally defective appointed by them, but such local authority is not to be obliged to provide accommodation for such cases unless a sum of 7s. per week per head is contributed by Parliament. A total contribution of £150,000 per annum by Parliament is authorised, but this is in addition to payments made for such persons as shall be transferred from Government institutions, such as prisons, reformatories, etc. It would require to be increased if Ireland is included.

It will be seen that many of the persons to be dealt with under the Bill are already, though unsatisfactorily, provided for in asylums, workhouses, prisons, reformatories and other institutions, and therefore their transference to institutions of the kind contemplated would tend to reduce the expense of the existing establishments, and as regards asylums to lessen the overcrowding which is so very general; while once the new institutions were established, the increased contribution from Imperial sources (from 4s. to 7s. per head per week) would minimise the additional strain upon the rates. The provision of the necessary institutions in the first instance would, however, constitute a heavy initial expenditure such as the Royal Commission on the Feeble-minded has stated could not possibly be borne by the ratepayers unless they receive a substantial building grant in aid, and in this respect, as well as in respect of maintenance, it would seem that Ireland has a special claim for generous treatment, for the following reasons:

(1) Emigration leaves an undue proportion of the senile feeble-minded class, who are mostly in indigent circumstances, and hence gravitate to workhouses and asylums.

(2) The younger feeble-minded often find their way into State or State-aided institutions such as prisons, inebriate and ordinary reformatories, and their removal from these would reduce expense to the State.

(3) Consequent to some extent on the admission of such persons to the district asylums, the grant-in-aid, normally 4s., has been greatly reduced, and so a still greater burden has been thrown on the ratepayers.

It would, therefore, seem reasonable to expect a special grant in aid of building institutions to be made to this country.

But, after all, the strongest argument for the extension of the Bill to Ireland is the crying need for some provision for the non-insane defectives of all ages, who, under existing circumstances are left to drift into lives of degradation, crime and disease, and to hand on their own defects in aggravated form to their hapless and often illegitimate offspring, thus sowing the seed of an ever-increasing crop of degeneracy, and building up an ever-increasing burden of expense to the community.

R. R. LEEPER,
*Hon. Sec., Irish Division,
Medico-Psychological Association.*

MENTAL DEFICIENCY BILL.

From the Irish Division of the Medico-Psychological Association of Great Britain and Ireland. Suggestions for a new Clause 68 to include Ireland.

Clause 68: This Act shall apply to Ireland subject to the following modifications:

The Central Authority to be constituted as recommended by the Royal Commission on the Feeble-Minded, *viz.*, with the Registrar in Lunacy and the two Inspectors of Lunatics as a nucleus, together with unpaid Commissioners not exceeding two; the Registrar in Lunacy to be *ex-officio* Chairman.

References to His Majesty the King and the Secretary of State to be taken as meaning the Lord Lieutenant of Ireland; the Lord Chancellor to mean the Lord Chancellor of Ireland.

The Local Government Board to mean the Local Government Board of Ireland.

The Commissioners in Lunacy to mean the Inspectors of Lunatics.

The Prison Commissioners to mean the General Prisons Board of Ireland.

Provisions affecting the Education Authority not to apply.

In Clause 18 of the Bill the word "Overseer" to be omitted, and the words "manager of national school" added.

The Judicial Authority to be a County Court judge, a resident magistrate, or any justice annually appointed as such judicial authority in accordance with regulations analogous to those contained in Section 10 of the Lunacy Act, 1890.

Clause 21: Petitions to be heard by the Lord Chancellor or any Lunacy Judge under the Lunacy (Ireland) Act, 1901, in accordance with rules to be made by the Lord Chancellor.

Clause 38: Regulations to be made by the Commissioners with the approval of the Lord Lieutenant.

(This is on the supposition that the Registrar in Lunacy is to be Chairman of the Commissioners, otherwise the rules should be approved by the Lord Chancellor before being submitted to the Lord Lieutenant.)

Clause 41 (7) may require modification.

Clause 61 does not apply, but Sections 68, 69, and 113 of the Lunacy Regulation (Ireland) Act of 1871 shall apply in the case of persons dealt with under the Act, no matter what the amount of their property.

Clauses 37 and 64 do not apply, and Clause 68 (2) is withdrawn.

National Association for the Feeble-Minded.

Denison House,

296, Vauxhall Bridge Road,
S.W.

AMENDMENTS TO THE MENTAL DEFICIENCY BILL RECOMMENDED BY THE
EXECUTIVE AND MEDICAL COMMITTEES OF THE NATIONAL ASSOCIATION
FOR THE FEEBLE-MINDED.

Executive Committee.

President: Lady Frederick Brudenell-Bruce.

Chairman: Sir William Chance, Bart.

Hon. Treasurer: Sir R. Biddulph Martin, Bart.

Lord Frederick Brudenell-Bruce; Miss Bushell; Harry Corner, Esq., M.D.; Miss Craster; Mrs. H. St. L. Curteis; Miss Evelyn Fox; Leonard G. Guthrie, Esq., M.D., F.R.C.P.; Mrs. St. John Hope; Miss Kelsey; E. Montefiore Nicholls, Esq., M.A.; W. E. Mullins, Esq., L.C.C.; Mrs. Kinsey Peile; H. F. Pooley, Esq.; Mrs. Western.

Hon. Medical Consulting Staff.

Leonard G. Guthrie, Esq., M.D., F.R.C.P., *Chairman.*

London.—Harry Corner, Esq., M.D., M.R.C.S., late Resident Physician, Medical Superintendent, Earlswood Idiot Asylum; Miss Dickinson Berry, M.D., L.R.S.P., Assistant Medical Officer, Education Committee, L.C.C.; R. Langdon Down, Esq., M.B., M.R.C.P.; T. N. Kelynack, Esq., M.D., M.R.C.P., Hon. Secretary of Society for Study of Inebriety; F. W. Mott, Esq., M.D., F.R.S., Pathological Laboratory, London County Asylum, Claybury; Dr. Agatha Porter, L.R.C.P., L.R.C.S., Royal Free Hospital and New Hospital for Women; Dr. Ettie Sayer, M.B., B.S., Assistant Medical Officer, Board of Education, L.C.C.; C. J. Thomas, Esq., M.D., M.R.C.S., Assistant Medical Officer, Education Department, L.C.C.; William Hill, Esq., M.D., Consulting Surgeon for Diseases of Ear, Throat and Nose, St.

Mary's Hospital; Charles S. Blair, Esq., M.D., F.R.C.S., Clinical Assistant, Royal Eye Hospital, Southwark; E. Wallis, Esq., M.R.C.S., L.D.S.; Dr. Constance Long, M.D., L.S.A., Medical Officer to the Education Committee; Walter E. Fry, Esq., F.R.C.S.

Provincial Members.

Birmingham.—W. A. Potts, Esq., M.D., Medical Expert, Royal Commission on Care and Control of Feeble-minded; G. A. Auden, Esq., M.D., M.R.C.P., Medical Superintendent, Education Committee, Birmingham.

Bradford.—F. W. Enrich, M.D., Professor Forensic Medicine, Leeds University.

Brighton.—Dr. Helen Boyle, M.D., L.R.C.P., Medical Officer, Lewes Road Hospital for Women and Children, Brighton.

Bristol.—J. Mitchell Clark, Esq., M.D., F.R.C.P.

Cambridge.—Sir Clifford Allbutt, K.C.B., F.R.S., Regius Professor of Physics, University of Cambridge.

Cardiff.—Charles Downing, Esq., L.R.C.P., M.R.C.S.

Coulsdon.—Fletcher Beach, Esq., M.B., F.R.C.P., Hon. Physician to Chalfont Colony for Epileptics.

Guildford.—A. F. Tredgold, Esq., L.R.C.P., F.R.C.S., Medical Expert to Royal Commission on Feeble-minded.

Leicester.—Frank M. Pope, Esq., M.D., F.R.C.P., Consulting Physician to Leicester and Rutland County Lunatic Asylum.

Liverpool.—C. F. Macalister, Esq., M.D., F.R.C.P.

Manchester.—Charles H. Milland, Esq., M.D., M.R.C.P., Medical Expert to Royal Commission on Feeble-minded.

Newcastle.—Dr. Ethel Williams, M.D.

Nottingham.—E. Powell, Esq., M.R.C.S., L.S.A., Superintendent, City Asylum, Nottingham.

Oxford.—A. L. Ormerod, Esq., M.D., F.R.C.P., Medical Officer to Education Authority, Oxford.

Sheffield.—R. P. Williams, Esq., M.D., Assistant Medical Officer of Health to City of Sheffield.

The Executive and medical committees of the National Association for the Feeble-Minded wish strongly to urge the following recommendations and amendments:

RECOMMENDATIONS.

(1) A dual authority is inadvisable and control should be vested in the hands of the Lunacy Commissioners.

(2) Should the authority be the Lunacy Commission, it should be suitably strengthened by the addition of new Commissioners including at least one woman.

(3) Should the new authority be constituted as in the Bill, in view of the inevitable overlapping of the work of the two bodies of Commissioners, definite machinery should be contained in the Bill to co-ordinate the work of these two bodies until such time as amalgamation takes place under Sec. 62.

(4) Clause 2: In event of the Commissioners being appointed, as suggested in the Parliamentary Bill, it is desirable that the legal and medical professions should be duly represented.

(5) Clause 4: Ownership of licensed houses under the Lunacy and Idiots Act should be made a disqualification.

(6) Clause 8: Attention is drawn to the non-mention of women in the clause providing that a council having a single visiting or asylums committee under the Lunacy Act, 1890 to 1911, may empower that committee to act for the care of the mentally defective, and that provision should be made for their being placed on such committees.

(7) Clause 27: The Committee consider that a medical report should always be procured.

(8) Clause 29: Attention to be drawn to the absence of a medical certificate.

(9) Attention is to be drawn to the safeguards included in the clauses as to re-certification and discharge contained in the Feeble-Minded Control Bill as amended. (See clauses 10, 11, 13 and 15.)

(The Committee suggest that these would probably come in under clauses 31 and 32 of the Government Bill.)

AMENDMENTS.

Clause 3, page 2, line 23: After "inspectors" add "some of whom should be medical practitioners."

Clause 11, page 5, line 16: After "appoint" insert "and pay."

Clause 12, page 5, line 22: After "area" insert "not in institutions for defectives or otherwise provided for under this Act."

Clause 12, page 5, line 29: Leave out (c) "to keep register of defectives." If line 29 is retained, after "defectives" insert "subject to this Act."

Clause 12, page 6, line 33: At end of clause add "provided that if at any time the Commissioners are of opinion that a Local Education Authority is not making such provision as is reasonably necessary under the Elementary Education (Defective and Epileptic Children) Act of 1899 they may direct the local authority to make provision under this Act for such children as require it."

Clause 13, page 6, line 37: After "area are" insert "not in institutions for defectives or otherwise provided for under this Act and are."

Clause 17, page 8, lines 34 and 35: Delete "Defectives" and insert "(1) Idiots, or (2) Imbeciles or (3) Feeble-minded and."

Clause 17, page 9, lines 11, 12, 13: Leave out paragraph "e" and insert "who are in need of further care and control, and are a source of injury or mischief to themselves or others."

Clause 17, page 9, line 16: After "State" insert "on the advice of the Commissioners under this Act."

Clause 17, page 9, line 18: At end insert "or (4) Moral Imbeciles, or (5) Mentally infirm persons who are (1) found wandering about, neglected or cruelly treated. (2) In need of further care and control, and are a source of injury and mischief to themselves or others."

Clause 17, page 9, line 39: After "some" insert "permanent."

Clause 17, page 10, line 1: Leave out "strong" and insert "habitual."

Clause 18, page 10, line 10: Leave out "within the meaning of" and insert "and is subject to be dealt with under."

Clause 20, page 10, line 20: Leave out "friend" and insert "responsible person having personal knowledge."

Clause 19, page 10, line 19: At end insert "Nothing in this Act shall prevent a feeble-minded person who is over twenty-one years of age, from voluntarily placing himself as a boarder in a certified house or institution, provided always that notice of his reception shall be given to the Commissioners within twenty-four hours of his reception by the owner or manager of the certified house or institution into which such boarder has been received."

If any owner or manager fails to comply with the provisions of this section he shall for each day or part of a day during which the default continues, be liable to a penalty not exceeding five pounds.

If the Commissioners after inquiry are of opinion that the mental state of any boarder received into a certified house or institution is such as to render him unfit to remain as a boarder, they may order the owner or manager of the certified house or institution either to remove such boarder or to take steps to obtain an order for his reception as a defective and subject to be dealt with under this Act.

Any owner or manager failing to comply with an order of the Commissioners made pursuant to this section shall, for each day during which the default continues, be liable to a penalty not exceeding five pounds.

Every boarder shall, if required, be produced to the Commissioners and visitors respectively on their respective visits.

A boarder may leave the certified house or institution in which he is a boarder upon giving to the manager thereof three days' notice in writing of his intention so to do.

If any person is not allowed to leave the certified house or institution in which he is a boarder after the expiration of three days' notice to the manager thereof of his intention so to do, he shall be entitled to recover from the manager ten pounds as liquidated damages for each day or part of day during which he is detained."

Clause 20, page 11, line 1: After "one other person" leave out sentence in brackets (who may be one of the persons who gave a medical certificate), and insert "who should be a qualified medical practitioner."

Clause 25, page 14, line 19: After "twenty-one" insert "and subject to be dealt with under this Act."

Clause 25, page 14, line 24: After "Defective" insert "and subject to be dealt with under this Act."

Clause 25, page 14, line 41: At end insert "Nothing in this section shall prevent a parent or guardian of a feeble-minded person under twenty-one years of age, and not subject to this Act, from placing such a person in a certified house or institution for defectives or under the guardianship of a suitable person, provided that notice of his reception shall be given to the Commissioners, within twenty-four hours of his reception by the guardian, owner or manager of the certified house or institution in which such person has been placed."

Clause 25, page 14, line 38: Leave out paragraph 4.

Clause 31 or 32, pages 17 and 18: Insert, "Nothing in this Act shall operate to deprive any parent, guardian, or relative being above the age of twenty-one years, of any feeble-minded person certified under this Act, of the care, control, and protection of such feeble-minded person, upon proof being given to the Commissioners by such parent, guardian, or relative being above the age of twenty-one years, that such feeble-minded person, in respect of whom application is made, will receive adequate care, protection and control."

Clause 38, page 21, line 10: After "and" insert "general."

Clause 42, page 24, line 11: After "defectives" insert "if maintained by public funds."

Clause 47, page 26, lines 5 and 6: After "Defectives" insert "and subject to be dealt with under this Act."

NOTICES BY THE REGISTRAR.

PRELIMINARY EXAMINATION, MAY, 1912.

Successful Candidates.

Fort Beaufort, South Africa.—Joseph E. Richardson, Edmund B. Kekewich.

Pretoria, South Africa.—Frederick W. Hartnell, Joseph Derry, Tryntye Douma.

Brighton County Borough.—Ernest H. Vinchill, Frank Chatfield, Gladys Evans, Edward A. Hammond, Charles F. Manning, Ida Jones.

Chester County.—William Pritchard, Samuel C. Warburton, Mary C. Roberts, Nellie Harrison, Myfanwy Holman, Minnie Griffiths.

Cumberland County.—Charles H. Thorpe.

Devon County.—Ella Steer.

Essex and Colchester County.—Carolina A. Myall, Eva Chaplin, Cressie Chase, Emily Bolton.

Glamorgan County.—Lucretia M. Evans, Frederick B. Morris, Beatrice A. Maunder, Mary Davies, James Fortune, Ernest L. Williams, Daniel Jenkins, Ephraim E. Howard.

Kent County, Maidstone.—Ada C. Westover, Ethel Webb, Lily D. Byron, Alice G. Quick, William H. Long, Frederick Wickens, Emily M. Sutton, Winifred E. Spratt, Violet E. Sutton, Eliza C. Juniper.

Kent County, Chartham.—William C. Burbidge, Henry C. Williams, William H. Christian.

Lancashire County, Winwick.—Bertha Hudson, Annie Taker, Ellen Morris, Jane Eyre, Catherine McLoughlin, Elizabeth Williams, Bertha Coleman, William Hartley, Louis L. Lee, Thomas Hessian, James G. Brennan, John Pendlebury,

James Grant, John H. Nunn, George Gibson, George Newton, Davis Pirie, Herbert Jones.

Lancashire County, Whittingham.—Annie Edwards, Kathleen F. Manning, Eleanor Lewis, Margaret R. Gardiner, Elizabeth Lackland.

Lancaster County, Lancaster.—Albert Williamson, Laurence Burke, Mollie Walker, Margaret McShane, Ellen Kiely, Lillian A. Smith, Gladys M. Keavney, Ethel M. Green, Mary E. Davies, Hannah Bates, Louisa Balderstone, Margaret Battersby, Catherine Alderson, Elizabeth A. Baines, Thomas H. Hankey.

London City, Stone.—Ella Reynolds.

London County, Bexley.—Margaret Waterson, Annie S. Allen, Ida R. List.

London County, Cane Hill.—Jessie S. Legge, Thomas G. Beckett.

London County, Colney Hatch.—Cissie E. Mallinson.

London County, Claybury.—Florence M. Blair, Ellen E. Wright, Henrietta V. Gregory, Susan J. Harkin, Mary Field, Edith M. Simpkin, Margaret A. Williams, Alice Ryan, Edith G. Goodearl, Susan E. Kimble.

London County, Hanwell.—Norah F. Spence, Ada Francis, Alice J. Broad, Daisy E. Mount, Beatrice M. Hall, George Naldrett, Joseph Dawson, Alfred Hankin, George F. Thewless.

London County, Long Grove.—Elsie M. Pike, Emily Crossland, Kathleen E. Benson, Catherine E. Orr, Eliza Price, Cecilia Painter, Percy H. Stainsby, Augustus F. Waylan, Isaac Todhunter.

London County, Horton.—Mabel H. Robinson, Ida E. Gibbs, Jeannie Crawford, Margaret E. Jefferies, Margaret E. Kitchen, Eva M. Griffiths, Mary C. Turner, Emily G. King.

Leavesden, Kings Langley.—Mary E. Lee, Flora M. Young, Annie Schacht, Harriet Ray, Minnie E. Pote, Ethel A. Adams, Violet E. Nightingale.

Middlesex County, Napsbury.—Dorothy A. Westcott, James Payne, Frank H. Laundon.

Middlesex County, Wandsworth.—Gertrude Kingsley.

Manor Asylum, Epsom.—Blanche Vining, Ellen Rich, Annie C. Stoneman, Ethel Timms, Clarissa White, Maud M. Connolly, Lillian Cain.

Norfolk County.—Lucy Bassett, Ethel Hardiment, Alice M. Edwards, Madge Mattocks, Lilian Mattocks, Margaret M. Shreeve, Florence Hurstfield, William Baldoy, William Patrick, George A. Yates.

Northampton County, Berry Wood.—Marion E. Haynes.

Northumberland County.—Isabella Brown, Margaret A. Macdonald, Rose A. Quinn.

Staffordshire County, Cheddleton.—Lilian Smith, Dora Manning.

Salop County, Bicton.—Mary J. Hamplett, Charles Smithson, William Harris, James H. Rowson, Elizabeth L. Miller, Jesse Roberts.

Staffordshire County, Burntwood.—Agnes Brumbill.

Suffolk District.—Edward G. Wright, Herbert G. Rust, Harold E. Potter, Mary E. Wibberley, Edith R. Mann, Lilly M. Self.

East Sussex, Hellingly.—Ernest H. Spencer, William G. Brown, John W. Russell, Ella V. Welford, Elizabeth H. Welley, Minnie Green, Olive M. Pushman, Annie B. Buckle, Gertrude Cutts, Eliza A. Thomas, Florence G. Smith, Eliza Bolton, Albert E. Watts.

West Sussex, Chichester.—William Piper, Ernest Mason, Nora Ashton, Clara Gruit.

Surrey County, Netherne.—Annie Hall, Cecilia M. Mockett, Lillie Overton, Emma L. Shaw, Florence E. Sargeant, Alice Abbott, Florence McMillan, Albert E. Goldsmith.

Worcester County, Barnsley Hall.—John P. Delves, Gerald Brodrick, Frank B. Hastrop, Horace Orton, Walter Harris, Frederick Richardson, William M. Griffin, Francis A. Gill, Florence Jones, Florrie Tomkins, Daisy S. Price, Alma E. Smith, Amy Davies.

Yorks N. R., Clifton.—Clement B. Halliday.

Yorks, E. R., Beverley.—Frank Moody, Emily C. Cook, Margaret McGreevy.

Storthes Hall.—Cyril W. Bark, John H. Pearce, Lizzie Elliss.

Yorks, W. R., Wakefield.—Herbert Mellor, Frank Dale.

Yorks, Wadsley.—Maud E. Iddenden.

Yorks, Scalebar Park.—Walter A. Smith, Herbert Hewitt.

- Birmingham City (Rubery Hill).*—Frederick L. Reynolds, Alfred French, William L. Pinfield, William H. Childs.
- Birmingham City (Winson Green).*—Francis J. Roper, George E. Chatfield, Annie Bate, Gladys Park.
- Canterbury Borough.*—Florence M. Saunders, Ethel A. Burgess, Susan Jones.
- Cardiff City.*—Ethel A. Davys, Jean McCowan, Sarah C. Jenkins, Helen M. Perry, Edith Simcock, Florence E. Pearce, Margaret A. Lindsay, Harry Smith, Thomas Redmond.
- Derby Borough.*—Minnie Collishaw, Jessie W. Thorn, Nellie Wright, Frederick Ball, Percy Harrison.
- Leicester Borough.*—Ida H. Williams, Eliza M. Freeman, Dorothy E. Ward.
- Hull City.*—Fanny Poole.
- Notts City.*—Olive L. Donoghue, Alfred P. Wright.
- Portsmouth Mental Hospital.*—Beatrice Couzens, Ernest Churcher.
- Sunderland Borough.*—William H. Gray, William E. Jackson, David Moore, William T. Reay, Hilda Anderson, Agnes Steel.
- The Retreat (York).*—Dorothy Voysey, Gertrude Williams, Elsie Richardson.
- Bailbrook House (Bath).*—Gertrude Hulbert, Amy Howells.
- Bethlem Royal Hospital.*—George S. Worster.
- Holloway Sanatorium.*—Harold Goodwin.
- Camberwell House.*—Annie M. Marsden, Ethel Norman.
- Redlands (Tonbridge).*—Evelyn M. Lloyd.
- St. Lukes Hospital.*—Editha Nightingale.
- Aberdeen Royal.*—Margaret G. Taylor, Lizzie Taylor, Mary Wedderburn.
- Aberdeen District.*—William S. Stephen, Isabella N. Robertson.
- Argyle and Bute.*—Marion Martin, Isabella Martin, Catherine Rankin, Joan Morrison.
- Ayr District.*—Isabella M. Steel, Annie D. Allan, Kathleen Collins, George McPherson, Ferguson McClymont, Heney Donald.
- Banffshire District.*—Charles George, Annie Dawson, Maggie Scott, Susan Mackintosh, Isabella McKissack, Walter Joiner, John Rose, Charles Esson.
- Crickton Royal.*—William Connell, Mary J. Chesney, James Caldwell, John G. Richardson, James W. Geddes, Adam H. Thorburn, Sara S. Donnelly, Jeanie Cassie, Mary Stewart, Isabella Thirde, Janet P. Ferguson, Minnie Scott, Hannah Gass.
- Elgin District.*—Catherine G. Reid.
- Edinburgh District.*—Mary Crawford, Lily M. Green, Helen E. MacLachlan, Jean H. McMillan, Emily M. Woodman.
- Fife and Kinross.*—John B. Adams, George O. Milne, George Samson, Bella McHardie.
- Glasgow Royal.*—Agnes Barbour, Catherine Gould, Betty McKechnie, Margaret B. Macleod, Annie C. McLean, Morag Murray, William Hamilton.
- Glasgow District (Gartloch).*—Flora McDonald, Helen Johnston.
- James Murrays Royal.*—Lizzie A. Findlay, William Christie, Elizabeth Henderson, Lizzie N. Shand, Kate Cameron.
- Lanark District.*—Mabel Brown, Albert Hesketh.
- Midlothian and Peebles.*—Lilian F. Train, Hylda M. Hodgson.
- Montrose Royal.*—Margaret J. Stables, Flora Burgess, Flora C. Robbie.
- New Saughton Hall.*—Jessie B. Sutherland.
- Paisley, Hawkhead.*—Margaret Barr, Katherine W. Crawford.
- Paisley Riccarton.*—Mabel Falconer, Mary Cattinach, Agnes C. Chalmers.
- Perth District Murthly.*—James Paterson, Jeanie Cameron, Barbara Grant.
- Renfrew District (Paisley).*—Angus McDonald, Archibald McVicar, James K. Brown, Kate McIntyre, Bella Anderson, Katie Mackenzie, Grace Pringle, Georgina G. Johnson, John Campbell.
- Roxburg District (Melrose).*—Christian Home, John A. West, John Davidson.
- Stirling District (Larbert).*—James S. Rankine, Beattie Duthie.
- Richmond District.*—Delia Madigan.
- Farnham House.*—Patrick P. Moony, Annie M. Hennessy.
- Warwick County.*—Rosilla M. Corby.

FINAL EXAMINATION, MAY, 1912.

Successful Candidates.

Pretoria, South Africa.—Tryntya Pott, Elsie J. Ridge, Asta Iversen, Margaret Stewart, Martha J. John, Sarah F. Williams.

Brecon and Radnor.—Charles L. Edwards.

Bucks County.—Arthur E. Townsend, Percival F. May.

Chester County.—Margaret Roberts, Joseph R. Williams, Alfred Garston.

Cumberland and Westmorland.—Edward Glaister, Hugh Rawson.

Devon County.—Edith Wiscombe, Beatrice Wither.

Durham County.—Elizabeth Mowbray, Maude M. Clarke, Esther E. Davis, Annie McKiernan.

Essex and Colchester.—Elsie S. Lamb, Eliza Hollock, Florence A. Adkins, Lily Harrington.

Glamorgan County.—Frederick W. Preece, Dewis W. Salisbury, Frank Powick, Ella Kettle, Daisy F. Western, Nellie M. Quinn, Nina H. Jory, Mabel Gaul, Katie Rogers, Ellen F. Morgan, Jane Jones, Elizabeth A. Evans.

Holloway Sanatorium.—Eileen N. Palfrey, Anne E. Helcke, Rosannah M. Bradbury, Mabel R. Hunt, Elsie R. Triphook, Eleanor B. Ormsby, Herbert H. Kirk, Mary L. Alexander, Ruby Towers, Edith A. Lucas, George W. Burnnoll.

Kent County, Chartham.—Douglas H. Jordan, Alma E. Moore, Bessie H. Reeves, Charles W. Dean, Walter L. Streeton, Jessie F. Watts.

Middlesex County, Napsbury.—Alice S. Morrison, Alice M. Garrett, George Sale, Frank E. Finch, Allan G. Holden, Thomas K. Bathurst.

Middlesex County, Wandsworth.—Augusta Norton, Gwendoline Jenkins.

Norfolk County.—George F. Wiseman, Charles Edwards, Percival G. Keeble.

Northumberland County.—Mary A. Devenport.

Notts County.—Catherine F. Marwick, Annie E. Ostick, Mabel S. Smith.

Leavesden Asylum.—William J. Newberry, Mabel Crowe, Rose Lilley, Esther A. Farmer, Harriett A. Phipps, Elsie W. Coomber, Sarah North, Hannah Honey.

City of London, Stone.—James Cave, Winifred M. Simmonds.

Epileptic Colony, Epsom.—Edward J. Buckett, Henry J. Tate.

London County, Banstead.—Mabel May, Annie J. Priaulx.

London County, Bexley.—Alfred E. Woods, George W. Robinson, Bertram Cartwright, Elizabeth C. Norton, Lucy E. Mathien, Violet I. Walker, Herbert Smith, Francis F. Woolcott, Edith Burton, Constance Wray.

London County, Cane Hill.—Ethel M. Illman, Alfred J. Collings, Elizabeth Griffiths.

London County, Claybury.—Grace M. Norman, Nellie J. Wood, Elizabeth Williams, Mabel M. Dench, Caroline A. Harrison, William Crossland, Ernest W. Smith, George W. Allen, Thomas H. Wells, Walter Clements, George A. Reeves, John White, Stephen P. Kenny, Alfred J. Page, Herbert G. Davis.

London County, Colney Hatch.—Nellie T. O'Brien, Charles P. Crosskey, Emily Folwell, Helen C. Riddell, Phoebe Le Gassick, Mabel Thackway.

London County, Hanwell.—Mabel D. Collins, Henry E. Smith.

London County, Horton.—Agnes Hayes, Annie Basford, Annie Church, Harriet Griffin, William H. Roper, Robert H. Young, Joseph Smith.

London County, Long Grove.—Ellen B. Chandler, Agnes C. Yule, Ethel H. Tupman, Gertrude E. Firm, Violet M. Kemp, Mary Edwards, Frank W. Keeling, Robert C. Baker, George C. Simpson, Ernest Redman, Robert Butland, Charles B. Stuart, Arthur Hansford, Frederick Roome, Harry Wood, Thomas Cooper, Sidney Stone.

Salop County, Bicton.—Lilian M. Sheen, John Hatton, Margaret A. Jones.

Staffs County, Cheddleton.—Mary E. Skay, Elizabeth M. Leslie, Lora M. Walsh, Edith M. Best, Alice Wheaton.

Suffolk District, Melton.—Frederick Nunn, Elsie S. Davey.

Surrey County, Netherne.—Jennie M. Adams, Sarah J. Wilkinson.

Sussex County, Chichester.—Elsie Miles, Thirza Copeland, Thomas Jarvis, Horace W. Bennett, George Latter, Alfred Park, Charles A. Bourne, Bertram L. Keeshan, Winifred Brown, Daisy Norman, Florence Pescod.

Sussex County, Hellingley.—John Keble, Ernest V. Message, Amy Duggan, Laura Chambers, Louisa Weatherhead, Olive Lucas, Kate Page, Sarah L. Milward, Louise Saunders, Mary Collins-White, William S. Smith, Annie Chubb, Rosina F. Hendley, Alfred Perrin, Henry Parsons.

Three Counties, Hitchin.—Ellen Webb.

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Birmingham, Winson Green.—Frank J. Wheway.

Birmingham, Rubery Hill.—Henry C. Cotterill, Edith Brown, Jessie Edwards, Victoria Hayward, Louise M. Guy.

Bristol, City.—Annie T. Troughton.

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Leicester Borough.—Albert Knight, Archibald Groome, Joseph Ginns, Edith Elliott.

Notts City.—Sarah A. Smith, Ida M. Farr, Kate Fletcher, John A. Fray, Evelyn M. Scott, Grace Brightman.

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Sunderland Borough.—Robert McCulley, John Barnes.

York City.—Mary A. Whelan, Julia Dames, Agnes A. Bulman, Ivy F. Jarvis, Mary C. Leafe, Jennie Backhouse, Adelaide Berryman.

York Retreat.—Jeanne Anslow, Mary S. Brown, Minnie Craven, Sidney Hutchinson, Jane Meldrum, Samuel Eaton.

West Ham Borough.—Jessie Pearson, Elsie N. Graham, Mimosa Hall, Ellen Whiteman, Mildred Ridley, William Holland, William J. Goodway.

Bethnal House.—Patrick O'Brien.

Bethlem Royal Hospital.—Ethel C. Law, Elizabeth Dawson.

Aberdeen Royal.—Lizzie A. Gray, Agnes J. Cameron, Mary J. Smart, Margaret A. Noble, Mary Lobban.

Aberdeen District.—Janet H. Park, Jessie Robertson, John Duguid, Samuel Raeburn, John Main.

Argyll and Bute.—Mary C. Stewart, Janet R. Beaddie, Catherine Marshall, Hannah Gunn, Alexander Greehorn, Mary Barr.

Ayr District.—William R. Grant, Alexander Dawson, Robert White, Janet S. Oliver, Martha Turner, Robina S. Potts, Agnes Brydson, Helen Ramsay, Duncan McVean.

Crichton Royal, Dumfries.—Robert Glendinning, Catherine Munro, Minnie Nicholls, Hugh Fraser, William McDonald, Mary J. Murray.

Edinburgh District.—Jessie Petrie, Grace S. Grant, Julia L. Howden, Effie Speedie, Letitia M. Stevenson, Mary Paterson.

Edinburgh Royal.—Elizabeth Blenkiron.

Elgin District.—Alexander Hendry.

Fife and Kinross.—Jeannie Easson.

Glasgow, Woodilee.—Ernest F. Tracy, Alfred Coupe, Thomas Cunningham, Elisabeth Barr, Mary McDiarmid, Elizabeth Elder, Chrissie R. Fergusson.

Glasgow Royal.—Samuel Rennie, Malcolm McLennan, Isabella Forsyth, Annabella MacIver, Catherine McIntosh, Janet D. Brown, Alice H. Wilson.

Glasgow, Gartlock.—Mary F. Murrie, Sarah Mooney, Mary B. Knox, John Mackay, Arthur Watson.

Inverness District.—Jeannie Campbell, Frances Paterson, Susan Colguitt. Ailie Magregor, Donald Macdonald.

Lanark District.—John Cowe, Robert R. Michie.

Midlothian and Peebles.—Jean V. Hall, Dorothy Bundock, Mary Pyott.

Paisley, Hawkhead.—Margaret Anderson, Kate McQueen, Alexander Rothnie, Hugh Murray.

Paisley, Riccarton.—Alexander Matheson.

Perth District.—Ella Duffus, Annie G. Innes, Mary Stewart, Mary A. Barclay.

Renfrew District.—James M. Heron.

Roxburgh District.—Charles R. Buick, Theresa Allen, Mary J. Buchan, Helen McArthur, Elizabeth R. Murray, Margaret Roger.

Greenock Smithson.—Arthur Kinnear.

New Saughton Hall.—Hannah M. Johnson.

Ballinasloe District.—Mary Joseph, Bridget Meara.

Limerick District.—Nora Coughlan, Hannah Cremin, Thomas Ryan.

Londonderry District.—Sarah Tate.

Portrane.—Ellie Knight, Bridget T. McMorrow, James Maginniss, Tobias Laffoy.

Richmond District.—William Lawlor, James J. Shirley, James Caffrey.

Waterford District.—Margaret Murphy.

Stewart Institution.—Margaret Lambert, George Ripon.

Warwick County.—Christina G. Pearman, Emmie Wheelwright, Arthur Jones, Ernest H. Hughes.

Preliminary Examination, May, 1912.

1. Describe the formation of the shoulder-joint and mention its movements. If a patient sustained a dislocation of that joint, what treatment would you adopt before the arrival of the doctor?
2. What is blood? Describe the changes it undergoes on exposure to the air.
3. What great classes of salts are chiefly found in the human body? Give the usual sources and destinations of these.
4. Fully describe the process of absorption from the gastro-intestinal system.
5. Where does the urine come from? Why is it called an excretion? What is the average quantity passed in twenty-four hours?
6. Mention without description the various systems of the human body, and state shortly, without detail, the essential functions of each.
7. How would you act in the following emergencies:
 - (a) Deep wound in the neck with profuse hæmorrhage.
 - (b) Wound of wind-pipe, as in case of cut throat.
 - (c) Deep wound of thigh with free bleeding.
8. A patient is severely scalded, what is the immediate treatment?

Examination for Nursing Certificate—Final Examination, May, 1912.

1. What is a bed-sore? Describe its appearance and treatment and give fully the means you would adopt to prevent one from occurring.
2. Describe minutely the making and applying of a boracic fomentation in the case of a large furuncle of thigh.
3. Describe the general management of a case of typhoid (enteric) fever from the nursing standpoint.
4. Mention some symptoms of importance referable to disease of the nervous system.
5. Classify shortly the general symptoms of mental derangement, mentioning in what varieties of insanity one or more of them are likely to be found.
6. What dangers are general paralytics liable to? Mention the chief symptoms of this disease, referring especially to symptoms you yourself have seen.
7. In the nursing of the insane, what personal qualities should nurses and attendants chiefly cultivate?

8. As nurse-in-charge of an asylum country walking party, what classes of patients would you desire to take or reject? What dangers might you anticipate and how would you guard against them, with special reference to density or sparseness of population and its consequences in the matter of towns, shops, traffic, fields, woods, etc. ?

PRELIMINARY EXAMINATION.

The next examination will be held on Monday, November 4th, 1912.

FINAL EXAMINATION.

The next examination will be held on Monday, November 11th, 1912.

NOTICES OF MEETINGS.

Quarterly Meeting.—The next meeting will be held at 11, Chandos Street, Cavendish Square, on Tuesday, November 26th, 1912.

South-Western Division.—The Autumn Meeting will be held, by the courtesy of Dr. Mornington, at Laverstock House, Salisbury, on Thursday, October 24th, 1912.

Northern and Midland Division.—The Autumn Meeting will be held, on the invitation of Dr. Johnston and by the courtesy of the Asylum Committee, at Bracebridge Asylum, Lincoln, on Thursday, October 24th, 1912.

Scottish Division.—The Autumn Meeting will be held on Friday, November 15th, 1912.

Irish Division.—The Autumn Meeting will be held on Thursday, November 7th, 1912.

APPOINTMENTS.

Lind, W. A. T., M.D.Melb., Pathologist and Neurologist, Department of Lunacy, Victoria.

Parsons, L. D., M.B., Ch.B.Edin., Medical Superintendent of the Government Asylum, Colombo, Ceylon.

Clarke, J. Kilian, M.B., B.Ch., R.U.I., Assistant Medical Officer to the Essex and Colchester Asylum.

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Lewis C. Bruce, M.D.

Thomas Drapes, M.B.

VOL. LVIII.



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MDCCCXII.

"In adopting our title of the *Journal of Mental Science*, published by authority of the Medico-Psychological Association, we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the term mental physiology or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid; for although we do not eschew metaphysical discussion, the aim of this JOURNAL is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health, or to produce mental disease, are not less questions of mental science in its practical, that is in its sociological point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our JOURNAL is not inaptly called the *Journal of Mental Science*, although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formulæ of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow-men may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."—Sir J. C. Bucknill, M.D., F.R.S.

Asylum Reports have been received for 1911 from those marked with an asterisk:—COUNTY.—Beds, Berks, Bucks,* Cambridge, Carmarthen,* Chester, Chester (Parkside), Cornwall, Cumberland,* Denbigh, Derby,* Devon, Dorset,* Durham, Essex, Glamorgan, Gloucester, Hants, Isle of Wight, Hereford, Hertford, Kent (Barming),* (Chartham),* Lancashire (Lancaster), (Rainhill), (Prestwich),* (Whittingham), Leicester, Lincoln (Kesteven), (Bracebridge), London (Colney Hatch), (Hanwell), (Banstead), (Canehill), (Claybury), (Bexley), (Stone, Dartford),* Middlesex, Monmouth, Norfolk, Northampton, Northumberland, Nottingham, Oxford, Salop,* Somerset (Wells), (Taunton), Stafford (Stafford), (Burntwood), (Cheddleton), Suffolk,* Surrey, Sussex (East), (Chichester), Warwick, Wilts,* Worcester, Yorkshire (Wakefield),* (Wadsley), (Menston), (Clifton), (Beverley); BOROUGH.—Birmingham (Winson Green), (Rubery Hill), Bristol, Canterbury, Cardiff,* Derby,* Exeter, Hull, Hayward's Heath, Ipswich, Leicester, Middlesbrough,* Newcastle, Norwich, Nottingham, Plymouth, Portsmouth, Sunderland, West Ham.* HOSPITALS.—Manchester, Wonford, Barnwood,* Albert, Lincoln, St. Luke's, St. Andrew's, St. Ann's,* Coppice, Warneford,* Coton Hill, Bethlem, Earlswood,* Bootham, Retreat,* Colchester,* Broadmoor, Isle of Man; Metropolitan Asylums Board (Caterham),* (Darenth),* (Leavesden),* (Tooting Bec),* (Rochester House); Aberdeen (Kingseat),* Argyll, Ayr,* Dumfries,* Edinburgh, Midlothian, Fife, Dundee, Montrose, Inverness,* Lanark, Barony, Glasgow, (Royal),* (Woodilee),* Govan,* Gartloch,* Kirklands, Perth,* Murthly, Roxburgh,* Stirling,* Baldovan, Armagh, Ballinasloe, Belfast, Carlow, Castlebar, Clonmel, Cork, Downpatrick,* Ennis, Enniscorthy, Farnham, Kilkenny, Killarney, Letterkenny, Limerick, Londonderry, Maryborough, Monaghan, Mullingar, Omagh, Palmerston, Richmond, St. Patrick's, Sligo, Waterford.

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